

241254

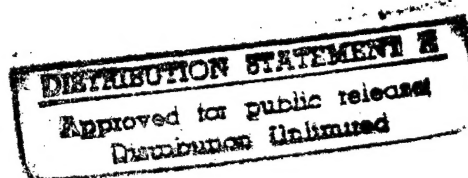
JPRS 83784

28 June 1983

# USSR Report

HUMAN RESOURCES

No. 87



DTIC QUALITY INSPECTED 6

19971229 187

**FBIS** FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

6  
50  
A03

## NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

## PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

JPRS 83784

28 June 1983

# USSR Report

HUMAN RESOURCES

No. 87

DTIC QUALITY INSPECTED 6

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

28 June 1983

# USSR REPORT HUMAN RESOURCES

No. 87

## CONTENTS

### LABOR

Gosplan Department Chief Comments on Labor Mechanization (N. Rogovskiy; PLANOVOYE KHOZYAYSTVO, Apr 83) .....	1
Ukrainian Economics Institute Conducts Commuter Survey (F. Zastavnyy; EKONOMIKA SOVETSKOY UKRAINY, Feb 83) .....	10
Factors Affecting Wage Fund Formation Examined (Various sources, various dates) .....	18
Wages, End Results, by Ye. T. Gaydar	
Stimulating Role of Wages, by T. Lisyuk	
Functions of Wages, by E. Lutokhina	



## LABOR

### GOSPLAN DEPARTMENT CHIEF COMMENTS ON LABOR MECHANIZATION

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 4, Apr 83 pp 47-53

[Article by N. Rogovskiy, department chief, USSR Gosplan: "On Full Mechanization of Labor"]

[Text] Free labor based on the high consciousness of workers, kolkhoz members, and the intelligentsia and on allout use of scientific-technical advances has become firmly established in our country. "All technical progress," V. I. Lenin wrote, "is also expressed in the fact that human labor increasingly retreats to a secondary position relative to machine labor."\* Guided by this Leninist principle the Communist Party and Soviet Government have since the first days of the Soviet system adopted a policy of industrialization and accelerated development of the industrial sector that produce the means of production.

In 1981 production of the means of production was 30 times as great as in 1940, which made it possible to create the technical basis for a radical change in the nature of labor in all sectors of the national economy, above all in industry, agriculture, construction, and transportation.

Consumption of electricity is a general indicator of the technical level of production. In 1981 electricity consumption in industry was about 79 billion kilowatt-hours compared to 34.8 billion in 1940. In 1950 our country used one-third as much electricity as the United States, but in 1981 we were just 10 percent behind. The technical equipment available to labor is also characterized by the capital-labor ratio, which in 1981 was more than double the 1970 level and 45 percent higher than in 1975, including 54 percent higher in machine building.

Technical progress is insured by a high level of development of science. In 1940 the USSR had slightly more than 98,000 scientific workers. Today the country has a far-flung network of scientific research institutions and organizations that carry on studies in all fields of knowledge. In 1983 there were 1,411,200 scientific workers, including 38,700 doctors of sciences and 409,700 candidates of sciences. According to figures from the USSR Central Statistical Administration, one-quarter of the world's scientific workers labor in the Soviet Union.

---

\* Lenin, V. I., "Poln. sobr. soch." [Complete Works], Vol 1, p 78.

During the 10th Five-Year Plan 3,476,000 measures related to new technology were introduced in the national economy, securing the hypothetical release of 2,790,000 persons and an economic impact of 21.8 billion rubles. In 1981 783,000 measures were carried out and produced an economic impact of 4.4 billion rubles. About 70 percent of the growth of productivity in industry in 1971-1981 came from the use of new machinery and scientific organization of labor.

Thanks to the development of scientific research and the large design and technological services at associations and enterprises, in the 10th Five-Year Plan alone 18,521 new types of machinery, equipment, and instruments were built and for 13,500 of these items manufacture and series production was begun.

A great deal of work is being done to introduce mechanized flow and automatic lines in industry. In 1981 there were 172,673 such lines, and of them 27,397 were automated. In the same year (on 1 July) 91,022 fully mechanized and automated sections, shops, and production facilities were in operation as well as 6,479 fully mechanized and automated enterprises.

In addition to mechanization and automation of production, automated control systems are being used widely in the current phase of technical development of production. In 1976-1980, 2,374 automated control systems were set up.

Inventors and efficiency workers are making a significant contribution to technical improvements of production. There are now 4.6 million of them. In the 10th Five-Year Plan they made 25.5 million efficiency proposals and applications for inventions; 20 million of them were carried out and produced an economic impact of 29.2 billion rubles.

In 1971-1980, 1,545,000 units of equipment at industrial enterprises were modernized, including 812,000 in the 10th Five-Year Plan. The corresponding figures for light industry are 795,000 and 423,000 units. But the scale of modernization is inadequate.

The most important indicators of the level of new machinery are increases in the unit capacity of machines and aggregates and mechanization of labor-intensive jobs.

In the power industry the unit capacity of steam turbines introduced during the prewar five-year plans was 100,000 kilowatts, while hydraulic turbines averaged 62,000 kilowatts. The corresponding figures for the 10th Five-Year Plan were 1.2 million and 640,000 kilowatts. It is also characteristic that at the present time 98 percent of all the capacities of electrical systems are controlled from control consoles equipped with telemetry.

The maximum unit capacity of installations for primary petroleum refining introduced in the prewar years was 1 million tons a year; in the 10th Five-Year Plan it was 8 million tons. In 1966-1981 the exploitation of deposits using the technique of maintaining layer pressure by pumping into the layer increased more than five times. Extraction of petroleum by this technique in 1981 reached 91 percent of total extraction.

In the coal industry mechanized narrow-sweep coal extraction in cutting faces with gradients of up to 35 degrees increased more than five times in 1965-1981. In 1981 the loading of coal in cutting faces in gently sloping and inclined layers was 96 percent mechanized. The excavation of coal and delivery in cutting faces, haulage of coal and rock, and loading them into railroad cars were already completely mechanized several years ago.

In ferrous metallurgy the maximum unit capacity of blast furnaces was 1,300 cubic meters of usable volume in the prewar five-year plans, but in the 10th Five-Year Plan it was 5,000 cubic meters. In the 7th Five-Year Plan the capacity of converters was 100 tons, but in the 10th Five-Year Plan it was 350 tons.

Radical changes have also taken place in production technology. For example, in 1965 53.6 percent of the steel was smelted using oxygen, but in 1981 the figure was about 80 percent. During this time the smelting of converter steel using oxygen increased 11 times. These changes had a beneficial effect on the quality of the metal and on machine building output, reduced labor-intensiveness, and therefore raised labor productivity.

Already by 1966 the timber procurement industry had for the most part completely mechanized felling timber, hauling it to upper yards, bringing it out, and other labor-intensive processes. At the present time sorting is 78 percent mechanized and stacking is more than 85 percent mechanized.

A great deal has been done to mechanize agricultural work. The foremost evidence of this is the fact that the power output of mechanical and electrical engines and electrical installations in agriculture in 1940 was 36.9 million horsepower, but in 1970 it was 318.9 million, in 1975 -- 454.6 million, and in 1981 -- 630.7 million horsepower. Available electrical power per working person rose correspondingly from 1.7 to 12.7, 18.3, and 27 horsepower, while calculated per 100 hectares of planted land the figures were 36, 161, 217, and 303 horsepower.

This rapid growth in available energy caused fundamental changes in the nature of agricultural labor. According to figures from the USSR Central Statistical Administration, the principal field jobs have now been fully mechanized; this means plowing, planting grain crops, cotton, and sugar beets, harvesting grain and silage crops, interrow tillage of fields of sugar beets, corn, and cotton, mowing hay, and the like. The mechanization of potato planting is close to completion.

Significant results have been achieved in mechanizing labor-intensive and unattractive jobs in animal husbandry. In 1981 cow milking was 90 percent mechanized, delivering water at livestock farms and complexes was 91-96 percent mechanized, feed distribution was 46-60 percent mechanized, and removal was 80-90 percent mechanized. Forty-five percent of the cattle feeding units and complexes have been fully mechanized, as have 65 percent of the hog operations and 75 percent of the poultry factories.

A great deal of attention has been given to technical equipment for the food, meat, and milk processing sectors of industry in order to optimize processing time for agricultural output and other types of raw materials and to reduce losses.

Labor construction has become much easier. Today this is an industrial sector where the primary jobs are done with the help of modern technical means. Earthwork, loading and unloading stone, sand, gravel, crushed rock, slag, lumber, metal, metallic and concrete designs, and cement have been fully mechanized, as has the installation of concrete and reinforced concrete construction elements. In 1976-1981 the power-worker ratio at state contracting construction-installation organizations increased by 30 percent.

Construction has begun especially rapid development in connection with broad use of factory-ready construction elements and parts. This has turned the construction site into a place where very large elements, assemblies, panels, and blocks are assembled with the help of the appropriate machinery. In 1981 the proportion of this kind of production reached 25.2 billion rubles or almost 41 percent of the total volume of construction and installation work done by state and cooperative enterprises.

These achievements were possible because the sector is constantly receiving new machinery and mechanisms. In early 1982 construction workers had 123,600 excavators, 32,600 scrapers, 117,800 bulldozers, and 162,300 mobile cranes.

A great deal of attention is being given to mechanization of labor in railroad transportation, which carries the bulk of freight and passengers. Technical progress at railroad enterprises finds expression above all in electrification of the roads and the use of new types of traction, electrical and diesel.

In 1940 two percent of the total length of railroads had been electrified, while in 1970 the figure was 25 percent and in 1981 it was 31.4 percent. Figures for lines served by diesel traction in the same years are 0.3, 56, and 68 percent. In 1981 electrical traction handled 56.2 percent of the freight turnover of railroad transportation and diesel traction carried 43.8 percent.

From the standpoint of conserving expenditures of live (in particular heavy) labor, mechanization of loading-unloading work is especially important. In railroad transportation it is 95 percent mechanized (92 percent of which is fully mechanized), while in maritime transportation the figure is 100 percent and in river transportation 99.98 percent. This has made it possible to free a large number of people from heavy physical labor.

The introduction of scientific and technical advances, above all means of mechanization, in the sectors of material production has caused steady growth in labor productivity. It rose 56.3 percent in industry between 1971 and 1980, which provided a relative savings of the labor of 13-14 million people. More than half of this savings was obtained by implementation of technical measures.

Mechanization of labor will continue to rise steadily in the future. In the remaining three years of the current five-year plan a broad program of measures is envisioned to reduce the use of manual labor. We will mention only the principal areas of technical improvement of production during this time.

Power machine building is incorporating the production of new thermal and fast reactors; steam turbines and turbo generators with capacities of 100 megawatts and the necessary assortment of high-voltage equipment; gas turbine automatic units for compressor plants, and other equipment.

Production of sets of equipment to extract coal in thin and steeply sloping layers is increasing. Fifty-five such complexes will be built in 1983. At the same time the production of scraper conveyors, drilling rigs, and self-propelled mining machines is broadening. Production of quarry excavators with bucket capacities of 20 cubic meters and a complex of high-productivity continuous-action machinery for stripping jobs is being incorporated. The production of 110-ton and 180-ton dump trucks and other equipment is growing.

The petroleum industry will be supplied with up-to-date universally installable and transportable comprehensive drilling rigs, caterpillar-type snow and swamp vehicles with load capacities of eight tons and diesel engines, and improved electrical welding equipment to weld pipes with diameters up to 1,420 millimeters.

The production of the basic means of mechanization for hoisting-transport, loading-unloading, and warehousing work is increasing.

For machine building and metalworking industry there will be an increase in the production of forge-press machines with numerical programmed control, automatic and semiautomatic forge-die machines, and new types of tools, including tools with isometric coatings, synthetic diamonds, and other superhard materials.

The manufacture of more productive equipment for other industrial sectors will grow. The national economy will receive tens of thousands of automatic manipulators.

The manufacture of highly productive machinery for the timber procurement industry and textile machines using new spinning principles will broaden significantly. Machine building for food industry will incorporate series production of sets of automatic flow lines, installations, and aggregates.

The production of computer equipment, in particular peripheral equipment, memory units, and high-speed computing complexes, will develop at a particularly high rate.

Agriculture will receive larger numbers of tractors, trucks, and harvesting combines for grain, sugar beets, potatoes, and cotton crops. At the same time plans envision preferential growth in production machinery for husbandry and feed production. The countryside will be supplied with improved tractors and agricultural machines. The average power of tractors in 1983 will be eight percent greater than in 1980, while the productivity of primary agricultural machines will average 20 percent higher.

Plans envision incorporating the production of several dozen types of new machines for crop farming. For mechanization of animal husbandry a set of various types of machines and equipment including 566 article descriptions has been defined for the 11th Five-Year Plan; 33 of them are already in production and 27 are in the incorporation stage. This will make it possible to significantly raise the level of full mechanization of labor in animal husbandry. Production of self-propelled feed distribution combines and other highly productive harvesting machines is envisioned for feed procurement.



In construction there will be continued improvement in the structure of the fleet of machines and means of transportation through an increase in the production of highly productive machines with greater unit capacities, including more powerful self-propelled scrapers, bulldozer-soil rippers, tractor-mounted pipe-laying machines, single-bucket lift trucks with pneumatic tires, boom-type installation cranes with greater load capacity, trailers for very heavy loads, standard concrete installations, concrete hauling trucks, concrete mixing trucks, earth hauling trucks, and trucks equipped with cranes for loading and unloading. All of these new machines will be produced with hydraulic and automated equipment.

In railroad transportation electrification of roads will continue, as will introduction of improved devices for automatic blocking, centralized dispatcher and electrical service, and communications. Industry is incorporating series production of new double-section mainline diesel freight locomotives with 8,000 horsepower; their productivity is 60-65 percent greater than the diesel locomotives now in use and their expected use between overhauls is twice as great. The average load capacity of mainline cars is rising and the production of special railroad cars is increasing. This will make it possible to significantly reduce, and in some cases completely eliminate, manual labor in loading and unloading.

In the motor vehicle fleet the proportion of vehicles with large load capacities and specialized beds will grow significantly. Rigs with sets of trailers and semitrailers will be used more broadly.

Major work is being carried on to supply means of mechanization to other sectors of the national economy too. But here, unfortunately, there are significant shortcomings and as a result the number of persons employed in manual labor is declining fairly slowly.

One of the main reasons for this is that five-year and annual plans for introduction of new technology and production of new types of output are not completely fulfilled. Many projects to build and introduce experimental and experimental-industrial models envisioned by scientific-technical programs of the State Committee for Science and Technology in 1976-1980 were carried over to subsequent years. Some of the machines and equipment manufactured do not meet current requirements. For the 11 machine building ministries in 1981 the percentage of output incorporated for the first time was lower than in 1976, while the proportion of output in production for more than 10 years rose.

Inadequate volumes of incorporation of new, technically improved means of production with an inadequate orientation of them to conservation of live labor has a negative effect on freeing persons engaged in manual jobs. In 1981 the USSR ministries of Coal Industry, Ferrous Metallurgy, Nonferrous Metallurgy, Heavy and Transport Machine Building, and certain others did not fulfill their assignments for this indicator. The level of manual labor is especially high in the USSR ministries of Fruit and Vegetable Industry (65 percent), Fish Industry (60 percent), Meat and Dairy Industry (49 percent), Food Industry (46 percent), and Coal Industry (45 percent).

The proportion of persons engaged in manual labor in loading-unloading, hoisting-transporting, and hauling freight is especially high. At the same time, the efficiency of measures to mechanize labor of auxiliary workers is 2-3 times higher than for primary workers.

USSR Gosplan has now prepared proposals to accelerate the mechanization of these jobs. At the same time the question arises: why are the measures envisioned in the five-year and annual plans for introduction of new technology and mechanization of manual jobs kept from being fully realized? The speech by General Secretary of the CPSU Central Committee Yu. V. Andropov at the November 1982 Plenum of the party Central Committee contains an exhaustive answer to this question. He observed that "for failure to meet the production plan one is held responsible, but for poor introduction of new technology perhaps the worst is a scolding."\* Discussing the serious shortcomings in planning and material incentive, Yu. V. Andropov said: "We must see that those who go boldly ahead with the introduction of new technology do not find themselves in an unfavorable situation."\*\*

Specialization of industrial production offers great opportunities for conserving labor. But the volume of specialized production of intersectorial output is inadequate. In machine building the specialized enterprises account for only an insignificant part of the total volume of intersectorial articles and services.

The repair services also need improvement. Of all the industrial workers engaged in equipment repair at the end of the 10th Five-Year Plan, only about 10 percent were at specialized repair enterprises. But work being done to improve the management of industry based on organizing associations makes it possible to consolidate and specialize repair enterprises and close down small, unproductive services.

The resolutions of the 26th CPSU Congress orient us to bolstering the action of intensive factors. This is the only realistic way to fulfill the plans for social and economic development both in the immediate future and in the longer run. No one disputes that this is true. But unfortunately, ministry and enterprise managers often allow their deeds to differ from their words. For example, practically everyone, especially managers, knows about the unfavorable demographic situation that has taken shape since the start of the current five-year plan. But in their draft plan for 1983 certain ministries and departments envisioned a growth in the number of persons working that exceeded growth in labor resources by 4-5 times.

There is only one way to overcome difficulties with labor resources: raise labor efficiency. It is wrong to create new jobs in regions where there is no free labor force. The most important reserves for solving the problem are raising the qualifications of workers and other working persons, strengthening production and labor discipline, and making maximum use of scientific and technical advances.

The comparatively slow rate of reduction of manual labor is to some degree a result of the fact that there has been no purposefulness and organization in this work. The situation changed in 1982. Machine building began to use the target program method of planning. It is having a positive effect on the technical level of production of new machines, equipment, and instruments and

---

\* PRAVDA 23 Nov 82.

\*\* Ibid.

insures that measures taken to reduce manual labor will be comprehensive. There are 45 programs that contain assignments for developing about 2,000 new articles, building them, and incorporating their production.

But the main thing now is the concrete plan for development of a comprehensive program to reduce manual labor in the period until 1990. This plan was ratified by USSR Gosplan, the State Committee for Science and Technology, USSR Gosstroy, the USSR State Committee for Labor and Social Problems, and the AUCCTU. The plan was written on the basis of the instructions of the 26th CPSU Congress concerning bolstering intensive factors of development in the country's economy. Emphasis is put not only on building and introducing new technology but also, and above all, on improving the use of existing fixed capital and taking those organizational and technical measures which demand little or no capital investment and material, labor, and financial expenditures.

Attention is being called to the need for preferential and more complete use of the existing stock of equipment and for modernizing it. Indeed, why build new enterprises when improving the use of production capacities already built can significantly increase the production of output? Simply reducing equipment downtime, raising the shift coefficient, and modernizing will make it possible to produce many billions of rubles more of goods that are needed to meet the needs of the economy and the population. This will also raise labor productivity, reduce the need for additional forces, and at the same time increase the number of workers employed on machines and mechanisms (both relatively and absolutely).

There is a need for thorough work on such highly efficient measures as improving the organization of production and labor, broad application of scientific organization of labor and the brigade and other progressive forms of labor organizations and material incentive, combining occupations, expanding service zones, introducing multimachine work, and improving working conditions.

The application of scientific organizational labor in industry alone, produces a savings of labor expenditures that averages about 400,000 persons a year. At the present time the appropriate scientific research institutes under the management of USSR Gosplan and the USSR State Committee for Labor and Social Problems are developing a methodology for planning work positions. This will further enhance the role, significance, and efficiency of introducing scientific organization of labor.

This document gives an important place to making more technical equipment available in production, increasing the production of means of mechanization that insure replacement of manual labor, above all heavy and unattractive labor, broad use of industrial robots and automatic control systems using microprocessors and minicomputers, and introducing automatic and semiautomatic lines and mechanized flow and conveyor lines.

Significant attention has been given to further development of standardization of machinery and equipment and their parts and assemblies, which makes it possible to use progressive (standard) labor-saving technological processes; to improving the repair and technical servicing of machinery, mechanisms, and equipment; and to building and introducing flow lines for repair and technical



servicing of machinery, progressive furnishings and mechanization and automation equipment that insure a reduction in the labor-intensity of repair work.

Development and implementation of the measures enumerated above will require great efforts from planning agencies, ministries, departments, associations, and enterprises. A significant decrease in the use of manual labor can only be achieved through combined efforts.

COPYRIGHT: Izdatel'stvo "Ekonomika", "Planovoye khozyaystvo", 1983

11,176

CSO: 1828/116

## LABOR

### UKRAINIAN ECONOMICS INSTITUTE CONDUCTS COMMUTER SURVEY

Kiev EKONOMIKA SOVETSKOY UKRAINY in Russian No 2, Feb 83 pp 55-60

[Article by F. Zastavnyy, professor, doctor of geographical sciences: "Daily Work Commuting of the Population and Problems in its Regulation"]

[Text] Among the broad range of scientific and applied problems, the urgency of which is increasing under conditions of deepening urbanistic trends, important significance is acquired by studies of work commuting between communities which is being accomplished most intensely to large and big cities. In an entire number of cities to which intercommunity commuting is growing at accelerated rates and reached considerable scales, from 10 to 25 percent or more of the population engaged in their public production consist of residents of suburban regions. For example, 197,000, 157,000, and 100,400 persons respectively reached such big cities of the Ukrainian SSR as Kiev, Khar'kov, and L'vov in 1980.

Work commuting between communities by the population is a difficult and multiplanned process, the comprehensive study of which is a matter of the time. At the same time, estimates which have been made permit us to consider that if commuter trips are accomplished by the population over short distances and do not cause unfavorable economic and social consequences, they should be evaluated favorably and should be considered as an effective factor in the economizing of material, labor, and financial resources since such commuting permits adapting, without significant additional expenditures, the settling of people to those shifts which are occurring in the siting of material production and are manifested in the intensifying territorial concentration of industry and other branches of the national economy and, consequently, in the appearance of new work places in urban settlements (in the absence of required labor force reserves there).

Such an approach to an evaluation of commuting contributes to a favorable solution of a number of important problems in the economic development of regions. We have in mind the possibility of reducing expenditures on the social infrastructure in cities through the use of part of the personnel of that available housing and those facilities in the sphere for servicing the population which are found in suburban areas and who are employed in them. Under conditions of somewhat limited public capabilities, the motives which have been presented play an important role in estimating the economic and social effectiveness of the population's work commuting.

The studies which have been conducted, however, also show that now along with favorable aspects, commuting also has many unfavorable aspects. They entail considerable losses of people's time in traveling and their transportation fatigue, and they limit opportunities for the comprehensive development of the personality, a rise in the workers' qualifications, the upbringing of their children, and care for them. In addition, the mass attraction of out-of-towners has a negative influence on the labor supply of the suburban areas and furthers the accelerated growth in the concentration of economic activity in large and big cities in relation to which, as is known, a policy of limiting their growth is being conducted.

In the working out of the problems in regulating commuting, an important place is allotted to providing the researchers with the necessary information. Here, it should be noted that the scantiness of initial data is one of the bottlenecks in substantiating the main directions in the solution of the assigned problem since the information in the statistical accounting which pertains to estimating the work trips of people is extremely insignificant. To accumulate the necessary data, special sociological studies were conducted and use was made of materials from studies conducted in SOPS [Council on the Study of Productive Forces] of the Ukrainian SSR of the Ukrainian SSR Academy of Sciences on drawing up balances of labor resources of all cities of the republic, of almost continuous investigations of productive forces of rural populated places of the Ukrainian SSR, and materials of other scientific and planning organizations pertaining to the determination of the number of commuters.

It is known that worker commuter trips are generated under the influence of social, economic, and demographic factors. Here, an exceptionally important role belongs to social factors since we are discussing evaluating the phenomena and processes which touch directly the interests of broad strata of the population. Comprehensive studies of the social motives which stimulate people to participate in work commuting trips and, thus, which form their intensity and territorial directionality permit disclosing the real reasons which exert the most substantial influence on the special features of these multiplan socio-economic processes, conducting the differentiation of commuting into rational and irrational required in such cases, and controlling it more effectively.

It is namely with such a goal that we, together with the L'vov department of the Economics Institute of the Ukrainian SSR Academy of Sciences, conducted a rather representative sociological questionnaire study of out-of-towners. L'vov was selected as the territorial object of this study. This selection was dictated by the fact that a high proportion of those residing in suburban areas (in 1980--20.5 percent) is observed in the structure of the workers employed in the branches of the national economy of this city. It was also considered that in the ranking of large and big city settlements this city occupies a central position in expenditures of time on work trips of the out-of-towners who are working there. This permits "transferring" with a certain conventionality the structure of expenditures of the indicated time which has been disclosed for it to other cities being investigated and ensures more or less acceptable final estimates.

To generalize the results of the survey which was conducted (6,061 people, or more than 6 percent of all commuters were investigated), the corresponding programs were prepared and calculations were conducted on a computer. The results obtained, in the form of groupings of absolute and relative indices, permit disclosing the

multiplan relations with consideration of the age of the out-of-towners, their education, wages, qualifications, number of years of work, family status, the time they spend on daily work trips, the way they are provided with housing, their desires to move to the city, and so forth and, on this basis, substantiating the criteria for differentiating commuting into its rational and irrational forms. Taken as such criteria are expenditures of time for the trip to the place of work and back and the desire of the out-of-towners to change over to permanent residence in the city. In turn, with consideration of these criteria it appears possible not only to disclose the scales of irrational commuter flows but also to conduct alternative calculations of expenditures required for their regulation.

It should be noted that a considerable portion of the commuters investigated make rather long trips. Of all the workers covered by the survey, 10.2 percent spend from 4 to 6 hours on the trip to their place of work and return, and 4.8 percent--more than 6 hours. In other words, every seventh person questioned is en route and waiting for transportation for more than four hours. If, in addition to this, we consider that another 12 percent of these workers spend from 3 to 4 hours on the indicated trips, it turns out that about 25 percent of all commuters accomplish irrational trips from the viewpoint of expenditures of time and transportation fatigue.

The regulating of intercommunity work commuter flows of the population rests on the necessity to forecast the number of out-of-towners working in large and big cities. Estimates which have been made show that the scales of irrational intercommunity work commuting will hardly increase in the future. This will be furthered by a complex of purposeful measures for the realization of the Soviet Food Program, in particular, for the further development of agricultural production, for raising the wages of the workers of kolkhoz and sovkhoz production, for the organization of public services and amenities and socio-cultural construction in rural populated places, and for making more active the economic life in economically promising small and medium cities. As a result, there will be a reduction in the differences in the level and way of life of residents of large and big cities and the residents of the areas adjacent to them and the disparities in actual possibilities to satisfy the material and spiritual demands of the population, selection of a profession, and so forth which are present there will decrease. Unquestionably, this will delay the growth in commuter flows. In addition, under the influence of scientific and technical progress the saturation with means of transportation will intensify, speed will increase, and the comfort of suburban transport will improve. As a result of this, a portion of the irrational commuter flows will be "converted" to the category of rational flows. There are sufficiently justified grounds to assume that the number of those out-of-towners who accomplish work trips subject to regulation will be maintained at approximately the contemporary level in the next 5-10 years.

Several possible directions in solving the problem of regulating irrational commuter trips by the population are being looked over practicably. Of greatest interest are two of them which, for scale and social significance, can be considered as component and mutually supplementing parts of an important regional goal-oriented integrated program for improving the territorial organization of productive forces which is awaiting its resolution.

The first direction presumes the substantiation and realization of a system of purposeful measures to eliminate the reasons which cause irrational work trips by the population. We are speaking of the fact that while still in the process of designing economic facilities which are being constructed or expanded we should provide at the place of labor activity all necessary social conditions for the life of the population which is drawn from other populated places.

The second direction presumes the substantiation and realization of a system of effective measures which are directed toward the elimination of irrational commuter flows which have already formed. We have in mind, first, the transfer of a part of the out-of-towners who have been released as a result of the rise in the productivity of labor to work at their permanent place of residence. The organization, in suburban areas, of branches and shops of associations, factories, and plants which are located in large and big cities and a growth in the shortage of labor resources in agricultural production are creating favorable conditions for the employment of such workers. Second, a considerable portion of the commuters, unquestionably, are to be transferred to permanent residence at the place of labor activity.

Since the moving of a portion of those who so desire to the cities is one of the real directions for eliminating irrational work commuting and entails considerable social expenditures, let us examine this question in greater detail.

The survey which was conducted permitted establishing that 74.4 percent of the commuters (including 72.8 percent of the males and 76.6 percent of the females) expressed the desire to move to the city. The results obtained and the indices presented for other cities (see Table 1) provide the opportunity to determine the expenditures necessary to ensure the transfer of a part of the out-of-towners to permanent residence at the place of work. The calculations necessary for this were performed using as examples those 11 large and big cities of the Ukrainian SSR in which the work commuter trips of the population are most intensive (about 75 percent of the commuters who accomplish trips to all cities of the Ukrainian SSR with a population of more than 100,000, or about 45 percent of the total number of out-of-towners who are working in all (412) cities of the republic are the share of these cities).

On the basis of consideration of the consolidated standards of expenditures for development of the sphere for servicing the population (housing and communal services, educational enterprises and institutions, culture, public health, trade, public catering, domestic services, and so forth), the additional volume of capital investments connected with the movement of a portion of the out-of-towners to the cities presented (see Table 2) has been determined. The total volume of such investments per movement of one commuter, including members of his family (family factor--3) was taken as 20,000 rubles.

Table 1. Number of Arrivals and Those Desiring to Move to City (thousand people)

Cities	Number of Arriving Out-of-Towners (1980)	Including Those who Spend per Day on Work Trips to Both Ends				No. of Those Wanting to Move to City	Including with Satisfaction of Desires by		
		3-4 h	4-5 h	5-6 h	more than 6 h		70%	50%	30%
Kiev	197.0	22.5	13.4	6.7	9.4	147.2	103.0	73.6	44.2
Khar'kov	157.0	17.9	10.7	5.3	7.5	117.3	82.1	58.6	35.2
L'vov	100.4	11.9	6.8	3.4	4.8	75.0	52.5	37.5	22.5
Odessa	64.0	7.8	4.4	2.2	3.1	47.8	33.5	23.9	14.3
Chernovtsy	45.3	5.2	3.1	1.5	2.2	33.8	23.7	16.9	10.1
Vinnitsa	30.2	3.4	2.1	1.0	1.4	22.6	15.8	11.3	6.8
Poltava	29.0	3.3	2.0	0.9	1.3	21.7	15.2	10.8	6.5
Ivano-Frankovsk	25.0	2.9	1.7	0.8	1.2	18.7	13.1	9.3	5.6
Zaporozh'ye	24.0	2.7	1.6	0.8	1.1	17.9	12.5	8.9	5.4
Sumy	18.9	2.2	1.3	0.6	0.9	14.1	9.9	7.0	4.2
Rovno	17.4	2.0	1.2	0.5	0.8	13.0	9.1	6.5	3.9
Total	708.2	81.8	48.3	23.7	33.7	529.1	370.4	264.3	158.7

Table 2. Capital Investments Necessary for Additional Attraction of Commuters to Permanent Residence in Cities (million rubles)

Cities	With Moving of Out-of-Towners who Spend Per Day on Work Trips to Both Ends				With Satisfaction of Commuters' Desires to Move to Cities by		
	3-4 h	4-5 h	5-6 h	more than 6 h	70%	50%	30%
Kiev	450	268	134	188	2060	1472	884
Khar'kov	358	214	106	150	1642	1172	704
L'vov	238	136	68	96	1050	750	450
Odessa	156	88	44	62	670	478	286
Chernovtsy	104	62	30	44	474	338	202
Vinnitsa	68	42	20	28	316	226	136
Poltava	66	40	18	26	304	216	130
Ivano-Frankovsk	58	34	16	24	262	186	112
Zaporozh'ye	54	32	16	22	250	178	108
Sumy	44	26	12	18	198	140	84
Rovno	40	24	10	16	182	130	78
Total	1636	966	474	674	7408	5286	3174

The results of the calculations which are presented show that the problem of regulating irrational commuting entails extremely significant expenditures. The change to permanent residence in the cities named by those out-of-towners who are working in them and who spend more than four hours on daily trips to both ends will require about 2 billion rubles in direct one-time expenditures for the further development of the sphere for servicing the population. And if we are speaking about eliminating all work commuter trips with a duration of more than three hours to both ends, at least 3.5 billion rubles will be required for this (for the country as a whole this sum will comprise respectively about 10 billion and 16 billion rubles).

Table 2 also presents necessary one-time expenditures for development of the services sphere depending on the degree of satisfaction of the out-of-towners' desires to move to their place of labor activity. The change to permanent residence in the cities by only 30 percent of those who desire will require more than 3 billion rubles of additional capital investments.

It is completely clear that the adoption of any of the presented criteria and proposed variants as the basis with their subsequent realization is not limited by capital investments alone. It is also necessary to consider a number of additional circumstances which, undoubtedly, will require the introduction of the appropriate corrections in the direction of increasing the indicated expenditures.

First, only one-time expenditures are considered in the table. At the same time, the functioning of facilities of the services sphere which have been built in the cities entails considerable current expenditures. It is known that in the suburban areas, where the available housing and many other economic facilities are primarily the personal property of citizens, the current costs in ensuring their functioning are fulfilled from the individual consumption funds. But under conditions of large and big cities, where available housing of state and cooperative enterprises and organizations predominates, a considerable portion of such expenditures are defrayed through public funds. Therefore, with the movement of a portion of the commuters to the cities changes also occur in the sources for financing the indicated current expenditures in the direction of increasing outlays of public funds for these purposes.

Second, the table does not reflect losses in material valuables in the form of homes and auxiliary buildings which are caused by movements to the city and which are left and are not always properly used in the suburban areas. In addition, the loads on many of the facilities of the social infrastructure which have been built there are reduced since formerly they were intended for satisfaction of the requirements of a larger population.

Third, to increase the volumes of housing and public utilities, social-cultural, and trade and domestic services construction it is accordingly necessary to increase the output of products by the construction materials industry and to strengthen the construction organizations. Otherwise, the construction of the required facilities of the social infrastructure will occur through a reduction in the rates of supplying the population already residing in the cities with housing and other facilities of the services sphere. With consideration of what has been presented, additional material, labor, and financial resources are also required.



And finally, fourth, it should be noted that the table presents calculations for only 11 large and big cities of the Ukrainian SSR. Unquestionably, work commuter trips to these cities are extremely intensive, and unfavorable consequences from their irrational forms are displayed most noticeably. However, considerable commuting, including its irrational forms, is also typical for many other cities which were not named here.

The circumstances set forth will unquestionably require a substantial increase in expenditures connected with the additional putting into operation of facilities of the social infrastructure in the cities. In comparison with the indices presented in Table 2, these expenditures will increase by at least 25-40 percent.

Just what are the actual times and probable duration for realization of the proposed measures?

Unquestionably, accomplishment of the proposed measures in the next few years is hardly realistic. For they should be preceded by a sufficiently long period over the duration of which a considerable volume of preparatory work is to be conducted. This includes the time necessary for the conduct of scientific studies and the accomplishment of pre-planning and planning developments. A number of other measures should also be conducted in advance. We have in mind the designing and synchronous increase in the production capacities of the construction materials industry and the strengthening of construction organizations so that the proper material-technical and resource support is placed beneath the additional volumes of construction of housing and other facilities of the sphere for servicing the population.

Along with the accomplishment of the indicated measures, it is also expedient to adopt effective measures to increase the productivity of labor in all branches of the national economy, regulate strictly the process of creating new work places, distribute efficiently the allotted limits of labor resources, and use the work force effectively. This will permit reducing the influx of the population into large and big cities. In turn, the solution of the problems which have been noted is closely tied with the creation of the proper conditions for the assignment of personnel in suburban areas which will be furthered by measures noted in the USSR Food Program which are directed toward raising the material incentives for the labor of workers in agricultural production, the expansion of social-cultural construction in the village, and so forth.

Considering the increasing economic and social significance of the problem of regulating work commuting to large and big cities, it is evidently necessary to initiate its wide study already in the immediate future. In the 11th Five-Year Plan it is expedient basically to complete the preparation of regional programs directed toward regulating work commuting and ensuring the optimum territorial balance between places of residence and places of people's labor activity. We are speaking of seeing that later on such comprehensively substantiated programs find their reflection in five-year plans.

COPYRIGHT: Izdatel'stvo "Radyans'ka Ukrayina", "Ekonomika Sovetskoy Ukrainy", 1983.

6367

CSO: 1828/115

## LABOR

### FACTORS AFFECTING WAGE FUND FORMATION EXAMINED

#### Wages, End Results

Moscow IZVESTIYA AKADEMII NAUK SSSR--SERIYA EKONOMICHESKAYA in Russian No 2,  
Mar-Apr 83 pp 36-47

[Article by Ye. T. Gaydar: "The Problems of the Improvement of the System of the Formation of the Wage Fund"]

[Text] The problem of strengthening the connection of the wage with the end results of the activity of economic units is examined. The analysis of the use of the standardized method of planning and the balance principle of the formation of the wage fund makes it possible to draw the conclusion that the assurance of a real interest of economic units in the increase of production efficiency is possible only in the presence of stable, permanent standards. The observance of this requirement is possible on the condition of the changeover from the use of standards of the amount of the wage subject to the production volume to standards of its increase and the elaboration and introduction of automatic regulators which prevent a groundless differentiation in the payment for labor.

The changeover of the economy to the intensive path of development and the sharp increase of the efficiency and quality of work in all the units of the national economy are impossible without the assurance of the real interest of collectives in the identification of the internal reserves. Whereas under the conditions of extensive development the possibility of achieving a high rate of economic growth by the commitment and concentration in the key units of additional manpower, material and financial resources existed, at present, under the conditions of intensification, precisely the increase of production efficiency at the level of enterprises is becoming the basic source of economic development.

The practical experience of the operation of the socialist economic mechanism convincingly showed that under the conditions of the limited increase of the resources being committed to the production process it is difficult for superior organs to establish for the economic units practicable plan assignments on the growth rate of economic indicators, if the economic units themselves are not interested in this. Here the plans are often either inadequately intensive or overintensive, which equally leads to considerable losses. The insufficient deliveries of fuel, raw

materials and semimanufactures, which are connected with the excessive intensity of the plans, and the lag in the placement of production capacities into operation upset the normal operation of the consuming enterprises and in many instances necessitate the making of changes in the plan of their work. As was noted in the Accountability Report of the CPSU Central Committee to the 26th congress, "the practice of adjusting the plans in the direction of their decrease has acquired a vast scale. Such a practice disorganizes the economy, demoralizes the personnel and accustoms them to irresponsibility" [1].

For a long time the conception, in accordance with which the real interest of economic units in the drafting of stepped-up plans can be ensured on the basis of the improvement of the formation and use of economic stimulation funds (the material incentive fund, the fund for sociocultural measures and housing construction, the production development fund, special funds), dominated both in theory and in practice. The shortcomings of the functioning of the system of economic stimulation funds during the 9th and 10th Five-Year Plans--the detachment of the standards of the formation of funds from the process of compiling the five-year plan, the instability, the frequent revisions of the standards--decreased substantially the stimulating effects of these funds. At the same time the very amounts of the economic stimulation funds also set rigid limits on their real influence on the behavior of the economic units. The management of an enterprise in the overwhelming majority of instances will not agree to the disclosure in the plan of large reserves of the increase of production efficiency in order to obtain an increase of the material incentive fund by 10-20 percent (1-2 percent of the gross fund for payment according to labor), taking the risk in case of the failure of suppliers to meet obligations, the delay of the placement of production capacities into operation and other unforeseen consequences of not fulfilling the plan with all the ensuing consequences for the level of the bonuses of the management, the evaluation of its activity by superior organs and so on, especially if in the next year the increased indicators can serve as an basis for giving the enterprise an unrealistically high plan.

At present it is indisputable that the assurance of a real interest of economic units in the increase of production efficiency and the disclosure of reserves is possible only on the basis of the long-term and stable coordination of the basic fund for payment according to labor--the wage fund--with the results of their work. The changeover, which was outlined by the decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979 on the improvement of the economic mechanism and is presently being implemented in practice, to the formation of the wage fund according to stable standards, which are approved in the five-year plan, from the production volume, as a rule, from the volume of the standard net output, and the corresponding extension of the rights of enterprises and associations in the area of the use of the wage fund are an important step in the solution of these problems. However, as Comrade L. I. Brezhnev indicated, "in practice well and poorly operating enterprises are placed at times under identical conditions. The nonfulfillment of the plan assignments is concealed by the adjustment of the plan in the direction of its decrease. At the same time the assets from the saving, which were obtained by the leading enterprises, are confiscated under various pretexts" [2].

The strengthening of the connection of the wage with the results of production presumes the assurance of the real stability of the standards, the comprehensive

use of standardized methods of planning the wage, particularly in the process of compiling the final version of the five-year plan, and the further increase of the flexibility of the wage system. If the need to strengthen the stimulating role of the wage and its connection with the end results of the labor of enterprises and associations were the only problem in the area of the payment for labor, it would be comparatively easy to solve it. In reality, however, at the same time it is necessary to constantly bear in mind the need to eliminate the groundless differentiation in the level of the wage of workers of different economic units. The growth rate of the volume and efficiency of production of enterprises and associations fluctuates substantially depending on factors which are not directly connected with the labor efforts of their collectives. The objective laws of scientific and technical progress, the amount of centralized capital investments, the changes of the structure of needs and the conditions of the supply of raw materials and materials, the base level of the utilization of internal reserves and so on have an influence on them.

As experience shows, the close coordination of the dynamics of the wage and the results of the activity in the absence of or in the case of an inadequate influence of standard levels on the groundless differentiation of the wage leads to an increase for a large group of dynamically developing enterprises of the growth rate of both the production volume and the wage fund. These indicators exceed substantially their average levels for the economy as a whole.

In itself the rapid increase of the wage in these units at first glance is not a threat for the disturbance of the existing proportions, for it is accompanied by the corresponding (or leading) increase of the end result of production--the gross income (net output). However, the rapid increase of the wage at rapidly developing enterprises leads to an increase of the differentiation in the payment for labor and the increase of the turnover of personnel and creates the urgent need to bring the level of the payment of labor of the enterprises, which for objective reasons are developing more slowly, in line with the new conditions.

The point is that an increase of labor productivity, which is equal to or at least close to the average for the national economy, and especially to the increase of labor productivity in the rapidly developing sectors, cannot be ensured in a significant number of national economic units owing to objective reasons.

For example, in the USSR with an overall increase of labor productivity in industry as a whole for the period from 1975 to 1980 by 17 percent, the increase of this indicator for machine building came to 39 percent, in the fuel industry--8 percent, in ferrous metallurgy--8 percent, in the food industry--4 percent and so on [4]. In Bulgaria with an increase of labor productivity for industry during the same period by 28 percent, this indicator in machine building increased by 44 percent, in the fuel industry--22 percent, the generation of electric power--12 percent, in the food industry--2 percent and so on [6].

As in result, in such sectors the increase of the wage can outstrip the increase of labor productivity and as a result lead to an overall outstripping of the increase of the wage with respect to the increase of labor productivity for the economy as a whole with the corresponding adverse consequences and the worsening of the situation on the market of consumer items. This, in turn, sharply decreases the stimulating effect of the wage.

Therefore the systems of stimulation, which do not envisage the elimination of groundless differentiation, prove to be inefficient, their use leads to serious contradictions in the economy.

As is known, there are two basic means of ensuring the connection of the payment according to labor with the results of production: they are the use of the balance principle of the formation of the wage fund and the standardized planning of the wage fund.

The contradictions between the need to increase the stimulating role of the wage and to limit the groundless differentiation in the payment for labor appear most vividly when using the balance principle of the formation of the wage fund.

The closest coordination of the wage with the results of the work of enterprises is ensured in the case of the use of the balance principle of the formation of the wage on the basis of the distribution of the gross income. Here the mandatory payments to the state and its local organs, the payment for credits and the interest on them are made from the gross income of the enterprise (the difference between the value of the sold products and the value of the material expenditures), while the remaining amount is distributed among the funds for the financing of investments, the reserve fund and the wage fund.

During the year workers and employees receive wages in the form of an advance, the final calculation of the wage is made after the end of the year, after the obtaining of information on the actual amount of the realized gross income and the directions of its distribution.

On this basis there is achieved a clear dependence of the average wage, first, on the dynamics of the basic factors which increase production efficiency at the enterprise--the decrease of material expenditures and the expenditures on the payment for credits, the increase of the production volume, the decrease of the number of employed people and so on lead directly to the corresponding increase of the average wage; second, on the achieved level of production efficiency--the base differences in the degree of utilization of resources also directly influence the proportions of the wage. If, for example, given the same number of workers at the time of the changeover to the use of the balance principle of the formation of the wage fund one enterprise creates a gross income, which exceeds by twofold the income of another enterprise, the level of the average wage at this enterprise in the absence of an influence of the standardized levers of the limitation of the differentiation and all other conditions being equal should also be twofold greater.

The substantial stimulating effect of the principle of the balance formation of the wage fund, which ensures the direct and clear dependence of the payment according to labor on the end results, is correctly indicated by the advocates of its use in USSR industry [4].

In industry the system of distributing the gross income in the purest form<sup>1</sup> has been used since 1961 in Yugoslavia. The experience of this country makes it possible to illustrate both the advantages of this method of organizing the payment according to labor and the problems and contradictions which arise here.

As practical experience has shown, this system is capable of having an especially strong stimulating influence on the uncovering of reserves of the increase of production efficiency directly in the local units--at enterprises and shops. If the wage, the basic source of the meeting of the needs of workers, depends decisively on the economical use of raw materials, energy and semimanufactures, if the average wage can be increased by the combining of occupations, the enlargement of the service areas and the release on this basis of a portion of the employed people, it is natural that the reserves are identified rapidly and efficiently. To a considerable extent this contributed to the comparatively rapid growth rate of the Yugoslav economy, which is developing under the conditions of a limitation of natural resources.<sup>2</sup>

At the same time a number of contradictions, which are connected with such an organization of the system of financing and material stimulation, also rapidly appeared. This model enables the capital-intensive sectors or the sectors and types of activity, in which favorable factors operate, to act as the initiators of the increase of personal income. Then they are extended to the remaining sectors as a consequence of the pressure which arises to counterbalance the excessive and groundless differences in the payment for the same work [7, p 529].

Thus, for example, the personal income per employed person in petroleum refining and gas processing in 1980 came to 11,531 dinars (160.1 percent of the average level for the national economy), in electric power engineering--9,240 dinars (128.9 percent). At the same time in the production of textiles it came to 5,799 dinars (80.1 percent), finished items made from them--5,413 dinars (75.5 percent), in the production of leather footwear and haberdashery articles--6,021 dinars (84 percent) and so on [8].

The suggestion that a portion of the income, which is connected with the effect of favorable factors, can be easily withdrawn on the basis of payments of the rent type, has not been confirmed in practice. It is extremely difficult to determine objectively the amounts of such payments, especially in those instances when they are connected with better conditions of the production or sale of products--a favorable location, proximity to sources of raw materials, a market monopoly. The orientation when organizing them toward the comparison of the actual levels of income and the withdrawal of the amount exceeding the average amount leads to leveling and does not stimulate the increase of production efficiency.<sup>3</sup>

The redistribution of the gross income and the reduction in it of the proportion of accumulation with an increase of the proportion of consumption, which led to a sharp differentiation of the structure of the distribution of the gross income among enterprises, were to a considerable extent the source of the increase of the personal income in the economic units with worse (for objective and subjective reasons) production results. Whereas in 1980 26.8 percent of them had a norm of profitability of up to 2 percent (a significant portion of them were unprofitable), 11.2 percent provided a profitability of more than 20 percent [10]. As a result the rapid overall decrease of the proportion of accumulation in the gross income of economic units began, during the period from 1971 to 1979 it decreased from 15.8 to 11.7 percent [11].

Theoretically the interest of the economic units in increasing accumulation for the purpose of ensuring the subsequent increase of the gross income and accordingly

the personal income should have prevented this process. However, the effect of this factor was inadequate. "The situation is such that the labor collectives of the main organizations of united labor so far do not perceive accumulation as a factor of development, do not see their own interest in it" [12].

In practice the socialist enterprises, which have come under difficult conditions due to the lack of assets for accumulation, are experiencing economic burdens only to a negligible extent. On the other hand, the inadequate increase of personal income, which does not exceed the average increase for the sector (but exceeds the increase of the gross income of the enterprise), can serve as a basis for the granting of additional credits, a favorable change of the level of state-regulated prices and so on. As a result in the situation of a steady increase of prices the tendency for real personal income to increase above the increase of labor productivity came to light [7, p 538].

The rapid and stable increase of investments, which is occurring in spite of the inadequate level of internal accumulation, is expediting economic development, is contributing to the elimination of the disproportions in the sectorial structure, but is leading to excessive indebtedness, including foreign indebtedness, and a high inflation rate, which, as is known, in turn contributes to the increase of the differentiation of income. During 1971-1978 the average annual growth rate of the amount of money came to 31 percent [13]. This, of course, could not but lead to the exceeding of demand over supply and to the rapid increase of prices.

Under these conditions the stimulating influence of the system of the distribution of the gross income on the identification of the reserves of the increase of efficiency also weakens considerably. As Yugoslav economist Dragomir Vojnic notes, "under the conditions of the very dynamic increase of prices and the cost of living... the organizations of united labor were considerably more interested in solving the problems of the level of their income on the basis of a campaign for a change of the ratios of prices than by a campaign for the increase of labor productivity, the improvement of the use of production capacities, the decrease of production costs and, in short, on the basis of a campaign for the increase of the efficiency of management" [14]. The constant aim at the increase of the nominal personal income, which under the conditions of inflation should have kept pace with the level of prices, led to the unjustified decrease of the differentiation of internal distribution within individual organizations and to an increase of the differentiation of the payment for the same quantity and quality of labor between different organizations.

The adverse consequences, to which the unjustified differentiation of the personal income of workers of different economic units leads--the decrease of the level of internal accumulation and the increase of inflation--gave rise to the need to limit the differentiation on the basis of so-called self-management agreements, which regulate the proportions of the distribution of the gross income for consumption and accumulation, the maximum and minimum wage levels and so on. The agreements actually made it possible to level a number of disproportions in the distribution of the gross income and to avoid the extremes in the differentiation of the personal income of workers. However, in the absence of a pronounced progression of the financial obligations of the organizations of united labor subject to the level and increase of the personal income of workers and the gross income as a whole the allocation by the organizations, which operate better or are under more favorable



conditions, of a greater proportion of the income for accumulation in dynamics leads to a faster rate of development with a smaller increase of indebtedness and to the further increase of differentiation with respect to the level of technological development, working conditions and in the end with respect to the level of income for personal and public consumption.

The steps on the state regulation of the increase of personal income, which have been taken since 1980 within the framework of the plan of stabilization, have made it possible to decrease the growth rate of the nominal wage and the degree of differentiation in the payment for labor and to increase the level of accumulation, but to a considerable extent they come into conflict with the overall logic of the system of the formation of the wage fund on the basis of the balance distribution of the gross income.

Thus, the use of the system of the balance formation of the fund of payment according to labor on the basis of the distribution of the gross income in its pure form, while making it possible to reveal quickly and efficiently the reserves of the increase of efficiency and to increase the interest of the workers in the end results of the work of the economic units, at the same time leads to a number of unfavorable economic consequences, which as a whole have a moderating influence on the interest of the economic units in the acceleration of the rate of scientific and technical progress and so on.

The method of the standardized planning of the wage as compared with the system of the balance formation of the wage on the basis of the distribution of the gross income makes it possible to level more rapidly and more easily the differences in the results of work. Whereas the system of the distribution of the gross income presumes the establishment of a connection of the payment according to labor not only with the increase of the result, but also with its level (the higher the level of the gross income per employed person is, the greater, other conditions being equal, the amount of the payment according to labor is), the standardized planning of the wage, which stipulates equal initial levels of work quality at different enterprises, makes it possible to coordinate the changes of the wage fund with the deviations of the production volume from the plan or the base level.

Of course, if the standards of the wage per ruble of output are elaborated in such a way that the base level of the average wage at a leading enterprise, which to a considerable extent has already revealed its reserves (for example, the Shchekino Combine), is established at the same level as that of an enterprise which operates more poorly and has the opportunity to increase labor productivity considerably, the enterprises which operated most poorly will be in a privileged position with respect to the payment for labor.

The solution here, apparently, cannot be universal, it presumes a detailed analysis of the conditions of production in specific economic units and of various factors and a differentiated approach to the determination of the connection of the payment with the base level of production efficiency. But, in our opinion, the mechanism of the balance formation of the fund for payment according to labor on the basis of the distribution of the gross income is suited appreciably worse for such individual solutions than the standardized planning of the wage. In the case of the balance formation of the wage fund for the purpose of eliminating the groundless differences in the payment for labor it is necessary either to envisage for the



enterprises, which are in a more favorable situation, the withdrawal of a portion of the gross income on the basis of the use of payments of the rent type or to regulate the distribution of the gross income, by stabilizing the proportion of the wage in it. Whereas the former method is by no means always suitable--the withdrawal of a portion of the gross income can be at variance with the requirements of the intensive increase of accumulation and capital investments in the given sectors and works, the latter method, in reality, leads more difficultly to the same standardized planning of the wage in the case of its coordination with the gross income.

This circumstance, in our opinion, makes the use of the standardized method of planning the wage preferable in the case of the coordination of the payment according to labor with the end results of production, especially at the stage of the changeover to methods of management, which are oriented toward the increase of the economic stimulation and economic independence of enterprises and associations, when the influence of the factors, which are attributable to the working conditions during the preceding period (capital investments, the structure of the production capacities, specialization, the assortment of the products being produced and so on), is still great.

It is possible to distinguish two basic modifications of the standardized method of planning the wage--the standards of the amount of the wage subject to the total production volume and the standards of the increase of the wage subject to the increase of the production volume. To date much experience in their use, which can serve as a basis of their comparative analysis, has been gained in the socialist countries.

At first glance, the coordination of the amount of the wage with the total production volume, which is presently being used in the USSR, provides a significant stimulating effect, for not a portion of the wage--its increase--but the entire amount is linked with the end result. A similar opinion is frequently encountered in economic literature, but seems inadequately sound to us.

This argument in favor of the use of this model of the standardized planning of the wage would make sense, if the standards for economic units were not individual, but universal, that is, were in effect, for example, for all the enterprises and associations of the sector. But in this case the standardized planning of the wage in essence does not differ in any way from the system of the distribution of the gross income and has the same drawback--it leads to the rapid increase of the differentiation with respect to the factors, which were in effect during the preceding period and on which the economic units, as much as they would like to, cannot have an influence. Therefore, in practice such universal standards of the amount of the wage cannot be used. For example, in the instrument making sector of the USSR the standard of the wage in 1979 came to 21.11 kopecks/ruble, while in forest exploitation it came to 36.25 kopecks/per ruble or 1.7-fold more [5].

The individual standards, which are elaborated separately for each enterprise and association, in the area connected with the base level of the wage merely establish the formed situation, as does the base wage fund in the system of standards of the increase of the wage subject to the increase of the production volume. In case of the need to take into account the specific conditions of the work of one unit or another both the construction of the standards of the amount of the wage

with allowance made for this specific nature and the direct adjustment of the base wage fund can be used.

At the same time the use of standards of the amount of the wage also rigidly links the increase of the wage with the increase of the production volume by the same proportions which regulate the connection of the base fund of the payment according to labor with the base production volume.

Assume, for example, that at three enterprises of the same subsector, A, B and C, as a result of the differences between the level of the development of production, which are not directly connected with the quantity and quality of the labor of the collectives, the expenditures of the wage per ruble of the net output are respectively 40, 50 and 60 kopecks. Assume that, on the basis of the national economic proportions, it has been established that an increase of the wage by 0.7 percent should correspond to an increase of the production volume in the given subsector by 1 percent. We have no grounds to differentiate the degree of dependence of the increase of the wage on the increase of the production volume merely because they are different during the base period. The increase of labor productivity depends to a considerably greater extent than its established ratios directly on the collective of the enterprise, especially if the changeover to the standardized planning of the wage is accompanied in conformity with the logic of the development of the economic mechanism by the broadening of the rights of enterprises and associations.<sup>4</sup>

The use at enterprises A, B and C of standards, which have been established at the level of respectively 0.4, 0.5 and 0.6 rubles of the wage fund per ruble of the production volume, does not make it possible to ensure the necessary ratio between the increase of production and the wage. Assume that the production volume at each of the enterprises is 1 million rubles. Then the wage fund of enterprise A is 400,000 rubles. In this case an increase of the production volume by 10 percent (to 1.1 million rubles) leads to an increase of the wage fund by 40,000 rubles ( $400,000 \times 1.1 - 400,000$  rubles), or also by 10 percent. The dependence--a 1-percent increase of the wage fund per 1-percent increase of the production volume--in this case will also be maintained at enterprises B and C.

This is at variance not only with the requirements following from the cited example (a 0.7-percent increase of the wage fund per 1-percent increase of the production volume), but also with the logic of the balanced functioning of the economy--for there are always sectors and enterprises, in which a more rapid increase of the payment according to labor than the increase of the production volume is permitted, but if in dynamically developing economic units in this case the increase of the wage does not lag behind the increase of the production volume, an overall lead of the growth rate of the wage as compared with the increase of the production volume is inevitable.

Consequently, in order to ensure the desired ratio of the increase of the wage and the production volume, it is necessary on the basis of the planned increase of the production volume to calculate individually for each enterprise the level of the standards. For example, if the planned increase of the production volume for each of the enterprises is equal to 10 percent, the standard, which ensures the desired ratio, will be:

$$\text{for enterprise A: } \frac{400,000 \times 0.1 \times 0.7 + 400}{1000 \times 1.1} = \frac{428}{1100} = 0.389,$$

$$\text{for enterprise B: } \frac{500,000 \times 0.1 \times 0.7 + 500}{1000 \times 1.1} = \frac{535}{1100} = 0.486,$$

$$\text{for enterprise C: } \frac{600,000 \times 0.1 \times 0.7 + 600}{1000 \times 1.1} = \frac{642}{1100} = 0.584.$$

The use of the standards of the amount of the wage fund requires their elaboration individually for each enterprise and for each year of the five-year plan, on the basis of the planned growth rate of the production volume, that is, at the stage of the compiling of the five-year plan they do not have a stimulating effect. Their role should come to light first of all in the annual plans in the process of revising the five-year plan and assuming counter obligations, in the process of fulfilling the plan. Let us examine their effect in this process from the point of view of the observance of the desired proportions between the increase of the production volume and the wage fund.

Assume that enterprise A in the process of adopting the annual plan on the base of internal reserves proposed to increase the assignments of the five-year plan on the increase of the production volume from 10 to 20 percent. Then its wage fund should increase to  $1,000,000 \text{ rubles} \times 1.20 \times 0.389 = 468,000 \text{ rubles}$ . The additional increase of the production volume by 10 percent is accompanied in conformity with the standard by an increase of the wage fund also by 10 percent ( $[468-428]/400 = 40/400 = 10 \text{ percent}$ ), which upsets the established proportions.

Thus, whereas in the process of compiling the five-year plan the standards of the amount of the wage do not have an effect--the individual values of the standards are a result of its drafting, in the process of their effect they can have a strong stimulating influence on the economic units, but do not make it possible to maintain the planned ratio of the increase of the production volume and the wage. If we attempt to introduce such standards in the process of drafting the five-year plan,<sup>5</sup> their increased stimulating influence will also intensify the disproportions in the wage, the dependence of the 1-percent increase of the wage on the 1-percent increase of the production volume will be carried over to the stage of the drafting of the five-year plan.

In our opinion, precisely the indicated shortcomings of the system of standards of the wage were the reason that practically nowhere was it possible to ensure their stable effect. Whereas, on the one hand, the standards of the amount make it possible to increase the wage fund at the same rate as the production volume (within the limits which exceed the assignments of the five-year plan), on the other hand, the inevitable individualization of such standards makes it possible to eliminate the arising disproportions in the simplest way--on the basis of the revisions of the standards in the direction of their decrease. As was noted, for example, at the December (1972) Plenum of the Bulgarian Communist Party, "instead of the standardized regulation of the wage the opposite is happening: the standards are being tailored to the wage and are almost not being used in the organization of labor and production" [15].

Unfortunately, such a method of eliminating disproportions not only weakens the effect of the system, but in essence undermines it. If the increase of the growth

rate of the production volume and the wage leads to the adjustment of the standards, the stimulating effect of the system becomes equal to zero and it turns into an unjustifiably complicated version of the control of the wage fund.

The regulation of the increase of the wage subject to the increase of the production volume makes it possible to resolve a number of contradictions which are connected with the use of standards of the amount of the wage. The distinction of the base wage fund makes it possible to use universal or sectorial standards, since the demands on the increase of the production volume per ruble of increase of the wage can be of a more universal nature as compared with their initial ratios.<sup>6</sup> The task of ensuring the planned proportions between the increase of the production volume and the increase of the wage is accomplished here directly by the establishment of the standard itself, in the adjusted amount of a 0.7-percent increase of the wage fund per 1-percent increase of the production volume. As a result the opportunity appears also to use the standards in the process of drafting the five-year plan, to ensure the lasting and stable interest of economic units in the increase of efficiency and the growth of the production volume and to avoid the adverse influence of the revision of individual standards on the interest of the economic units in revealing the reserves.

The indicated circumstances, in our opinion, make it possible to draw the conclusion that the stable coordination of the payment according to labor with its results can be ensured only on the basis of the changeover from the use of standards of the wage fund as a percentage of the production volume to the use of standards which coordinate their increases.

However, in itself the establishment of standards of the increase of the wage subject to the increase of the production volume without the use of standardized levers of the limitation of the differentiation of the average wage by enterprises does not make it possible to avoid serious disproportions in the payment for labor.

Centrally established standardized levers, which prevent the groundless differentiation of the wage, have been used in a number of socialist countries (Bulgaria, the CSSR and so on), but they have undergone the greatest development (since 1968) in Hungary. In our opinion, this factor along with others to a considerable extent promoted the assurance in this country of the stability of the coordination of the payment according to labor with the results of production.

Within the system of the regulation of the wage fund subject to the increase of the gross income, which is most prevalent in Hungary, it is envisaged that an increase of the amount of produced gross income by 1 percent gives enterprises the right to increase the wage fund by 0.4 percent. In case of a higher growth rate of the wage fund with respect to the increase of gross income an additional progressive tax is imposed on it. Since 1980 in the case of the exceeding of the increase of the wage as compared with the standard level by up to 1 percent the enterprise is obliged to pay to the budget 150 percent of the amount of the excess, from 1 to 2 percent--250 percent and more than 2 percent--300 percent. If the increase of the average wage of the workers exceeds a specific set level, an additional tax is also imposed on it.

The system of the regulation of the increase of the average wage subject to the increase of the amount of the gross income per employed person is used in the sectors,

of which the substantial fluctuation of the production volume is characteristic. In case of its use the enterprises have to right to increase the average wage by 0.3 percent with an increase of the production of gross income per employed person by 1 percent without taxation. Increasing payments are envisaged in the case of a more rapid increase. Moreover, an additional tax is envisaged in the case of an increase of the average wage by more than 9 percent.

Since 1969 the gradual weakening of the effect of the levers aimed at the elimination of the differentiation in the payment for labor has been the general trend of development of the regulation of the wage in Hungary. With the gaining of experience in using the economic mechanism, the increase of the economic independence and the increase of the responsibility of enterprises for the results of the work their rights in the area of the payment for labor have been broadened, the progression in the taxation of the increase of the average wage has decreased, the preferential, nontaxable interval of its increase has increased. But even at present these levers are an effective means of preventing the unjustified differentiation in the payment for labor.

At the same time the experience of developing the system of the regulation of the wage in Hungary also made it possible to reveal a number of contradictions in the effect of the levers of the regulation of the differentiation, which are oriented toward the restriction of the increase of the average wage.

The progressive taxation of the increase of the average wage often had the result that the enterprises were interested to a great extent in the attraction of additional manpower, which affected not the increase of the average wage, but the increase of the efficiency of the use of living labor. The changes in the production technology, which require the attraction of more skilled and, consequently, better paid labor, which, of course, required the rapid increase of the average wage, led to adverse consequences for the enterprises. On the other hand, the increase of the number of low-skilled personnel, while formally decreasing the level of the average wage at the enterprise, in essence made it possible to increase its level unjustifiably with respect to specific skills groups.

Precisely because the regulation of the wage fund by the decrease of the number of personnel creates extremely favorable opportunities for the increase of the average wage (the total saving is allocated completely for the additional payment for the labor of the other workers), it requires the mandatory use of a maximum level of the preferential increase of the average wage, the excess of which is assessed with a high tax which makes it practically unacceptable for the enterprise. This, of course, limits the interest of the enterprise in revealing the reserves and makes their retention for use during the next year advantageous.

A common drawback of the systems of regulation, which are oriented toward the restriction of the differentiation of the increases of the average wage, is the fact that they do not enable the enterprises, which for various reasons were in an unfavorable situation from the point of view of the payment for labor, to make up the lag comparatively rapidly.

It is possible to a considerable extent to avoid the manifestations of the indicated contradictions, if not the increase of the average wage, but the difference between the standardized wage fund, which is calculated on the basis of the actual

skills and job structure of the personnel of the enterprise and the standardized rates of the payment for labor, which have been approved by the state, and the actual wage fund is made the object of progressive taxation.<sup>7</sup>

In the case of the use of such a lever the prevention of the excessive differentiation of income is achieved by a more direct means, with allowance made for the differences in the pay of specific skills groups of workers. This makes it possible to eliminate the aspiration of enterprises for the "inflation" of the number of personnel by the attraction of low-skilled and low-paid workers for the purpose of decreasing the overall average level of the wage and increasing the possibilities of increasing the individual wage of workers.

The limitation of the increase of the wage acts more evenly in this case, the exceeding of a specific level of the increase of the wage does not lead to a sharp limitation of the interest of enterprises in the increase of the volume and efficiency of production.

Such a system can be an effective supplement of the standardized planning of the increase of the wage subject to the increase of the production volume.

The experience of developing the system of stimulation in the socialist economy, in our opinion, makes it possible to draw the conclusion that the coordination of the payment according to labor with the results of production can provide an impact from the point of view of the increase of production efficiency, its intensification and the revelation of production reserves only in the case of the use of stable, permanent standards, which are universal for the enterprises of the corresponding sectors and subsectors, and their use at the stage of the drafting of the five-year plan and in the case of the rejection of the arbitrary confiscation of the identified reserves. At the same time the observance of this requirement presumes the changeover from the use of standards of the amount of the wage subject to the production volume to standards which coordinate their increases and the elaboration and use of standardized, automatic regulators which prevent the unjustified differentiation in the payment for labor.

#### FOOTNOTES

1. As is known, at present the system of the balance formation of the wage fund on the basis of the distribution of the gross income is being introduced in Bulgaria. However, in Bulgaria in this case the standardized regulation of the increase of the wage and the progressive taxation of the excess of the average wage over the sectorial level are being retained, which in essence makes it possible to characterize the system being introduced as an intermediate system between the system of the balance formation of the wage fund and its standardized planning.
2. The growth rate of the final social product of Yugoslavia in 1966-1980 is 5.8 percent (in 1972 prices).
3. Similar difficulties when introducing the system of payments of the rent type are also arising in other socialist countries, particularly Hungary [9].

4. In principle, in spite of this the need for the differentiation of the connection of the increase of the wage fund with the increase of the production volume with respect to individual enterprises of the same sectors and subsectors can also arise, but the reasons for this should be more convincing than the differences of the base levels.
5. The individual standards are elaborated at the stage of the compilation of the control figures and are reported to the enterprise, and then the final version of the five-year plan is compiled with allowance made for the suggestions of the enterprises which are interested in the increase of the production volume.
6. Such sectorial standards are also being used in the USSR at present, but only for the adjustment of the wage fund in the case of the exceeding of the plan--for example, 0.7 percent in ferrous and nonferrous metallurgy, 0.6 percent in the chemical industry and in the production of construction materials, 0.5 percent in machine building and so on.
7. A similar system was used during 1956-1961 in Yugoslavia, but only as an intermediate step in the process of changing over to the system of the distribution of the gross income with the balance formation of the wage fund. S. Balasy proposes steps, which are similar in content and are aimed at the development of the system of the regulation of the wage in Hungary.

#### BIBLIOGRAPHY

1. "Materialy XXVI s"yezda KPSS" [Materials of the 26th CPSU Congress], Moscow, Politizdat, 1981, p 50.
2. "The Speech of Comrade L. I. Brezhnev at the CPSU Central Committee Plenum on 16 November 1981," KOMMUNIST, No 17, 1981, p 10.
3. "Narodnoye khozyaystvo SSSR v 1980 godu" [The USSR National Economy in 1980], Moscow, Finansy i statistika, 1981, p 137.
4. Skoblikov, Ye. A., "The Improvement of Cost Accounting on the Basis of the Net Output," IZVESTIYA AN SSSR. SERIYA EKONOMICHESKAYA, No 6, 1981, pp 48-61.
5. Kunel'skiy, L. E., "Zarabotnaya plata i stimulirovaniye truda. Sotsial'no-ekonomicheskiye aspekty" [The Wage and the Stimulation of Labor. The Socio-economic Aspects], Moscow, Ekonomika, 1981, pp 73-74.
6. "Statisticheski godishnik na Narodna Respublika B"lgariya" [Statistical Yearbook of the People's Republic of Bulgaria], Sofia, 1981, p 210.
7. Nusinovic, M., Teodorovic, I., "Programmed Distribution of Social Production", Ekonomski Pregled, 1978, No 9-10
8. "Statisticqi Godisniak Jugoslavije" [Statistical Yearbook of Yugoslavia], Belgrad, 1981.
9. Reves, G., "Regulation of Earnings in Hungary," ACTA OECONOMICA, Vol 20, No 3, p 286.

10. Vojnic, D., "Social Reproduction and Social Relations", EKONOMSKI PREGLED No 9-10, 1981, p 417.
11. "Privredna Kretanja" [The Economy of Employment], Belgrad, 1981.
12. "Social Direction of the Distribution of Net Income at Organizations of Labor Associations", EKONOMIKA UDRUZHENOG RADA No 10, 1979, p 556.
13. Pupovats, Z. "Experience and Problems of Carrying Out a System and Policy of Prices", EKONOMIKA UDRUZHENOG RADA No 10, 1979.
14. Vojnic, D., "Economic Effectiveness and Social Profits of Investment in the YSFR in the Postwar Period", EKONOMSKI PREGLED No 1-2, 1979, pp 28-29.
15. RABOTNICHESKO DELO, 14 December 1972.
16. Balasy, S., "The 'Unsolvable' Dilemma of Regulation Earnings in Hungary," ACTA OECONOMICA, Vol 20, No 3, pp 247-267.

COPYRIGHT: Izdatel'stvo "Nauka", "Izvestiya AN SSSR, seriya ekonomicheskaya", 1983

#### Stimulating Role of Wages

Moscow EKONOMICHESKIYE NAUKI in Russian No 1, Jan 83 pp 86-88

[Article by Candidate of Economic Sciences T. Lisyuk (Rovno): "On the Increase of the Stimulating Role of the Payment for Labor"]

[Text] As a result of the implementation of an extensive set of measures on the improvement of distributive relations under the conditions of the increase of the social productivity of labor the level of the wage of workers and employees in the USSR is steadily increasing. In 1980 its average monthly amount came to 168.9 rubles, which is 75 percent higher than in 1965; during the same period the average monthly pay of kolkhoz farmers increased by 2.3-fold, having amounted in 1980 to 118.0 rubles.

By the end of the 11th Five-Year Plan it is planned to increase the average monthly wage of workers and employees by another 14.5 percent and the pay of kolkhoz farmers by 20 percent and to increase their amounts respectively to 193 rubles and 142 rubles. The per capita real income will increase by 16.5 percent.<sup>1</sup>

An important function of the payment according to labor in socialist society is the stimulation of the labor activity of workers and the achievement of higher end results. The importance of this function is increasing substantially under present conditions, when the increase of production efficiency is playing a central role in the achievement of an increase of production. In order to achieve such an increase under the conditions of constant and accelerating scientific and technical progress, the workers should improve their skills level, while the payment for labor can be recognized to completely meet the present requirements only when it gives an incentive to this.

Meanwhile at present this function of the payment according to labor has weakened appreciably.



Under the conditions when the average wage could in no way increase at the same rate as the minimum wage (from 1960 to 1980 from 27 to 70 rubles, that is, by more than 2.5-fold), while the high labor income increased slowly or had completely stabilized, the actual processes of the increase of education and skills to a considerable extent lost touch with the actual increase of the payment according to labor and at present the necessary proportionality here is not being properly ensured. In the immediate future it is necessary, without relaxing the attention to the accomplishment of the social tasks of the convergence of the income and well-being of different groups of workers (and without forgetting the important role in this matter of public consumption funds), to increase the dependence of the payment according to labor on the skills of the workers, to the same extent, of course, as they are actually realized in the results of work.

The available experience of the work of enterprises should be used more extensively for the increase of the stimulating role of the payment according to labor in the increase of skills. At the Volga Motor Vehicle Plant, for example, a special additional payment to the wage rates for occupational workmanship, which is established subject to the individual abilities of the worker, his production experience and labor skills, has been introduced. The additional payment for occupational workmanship in the amount of 4 to 24 percent of the wage rate is making it possible to increase the role of the rate and to aim it at the increase of the efficiency and quality of labor. For example, in transportation and warehousing operations the mastering of second occupations (slinger, transport worker, truck driver, set maker, forwarding agent) and their performance increase the efficiency of the use of working time by 8-12 percent.<sup>2</sup> It is understandable that the experience available at the Volga Motor Vehicle Plant cannot be carried over mechanically to enterprises which are under essentially different conditions. But the need and possibility of accepting and, moreover, forming advanced know-how exist everywhere, and this should be constantly borne in mind.

One of the relatively special, but very important questions of the restoration of the required connection between the skills of workers and the payment for their labor involves the improvement of the ratio of the average wage of engineering and technical personnel and workers. In 1980 the wage of engineering and technical personnel in industry was only 14.6 percent higher than the wage of workers, in construction--2.4 percent, while in 1970 this excess came respectively to 36.3 and 34.7 percent and in 1965--45.9 and 48.3 percent.<sup>3</sup> Here it should be taken into account that not only technical performers, but also all managers and organizers of production--from the foremen to the directors of enterprises--are included in the category of engineering and technical personnel. It is not difficult to understand to what the preservation of the indicated trend in the growth rate of the wage of engineering and technical personnel and workers is leading in the future. It is widely known that already now there are many instances when the wage of the foremen and chiefs of shops is less than the wage of the workers subordinate to them.

It is understandable that this is not conducive to the attachment of specialists at a works, meanwhile precisely they are called upon first of all to act as the bearers of the achievements of the scientific and technical revolution. The shortcomings in the organization of the wage are a significant factor in the set of conditions, which is prompting many graduates of higher educational institutions, as well as experienced production specialists to seek "a place under the

sun" without fail at scientific institutions, and at times in the place of a worker, where there are no prospects of a scientific career, but it is possible to obtain a bigger wage.

Engineering and technical personnel bear particular responsibility for the progress of social production and the increase of its efficiency. In this connection there should be distinguished according to the level of pay those specialists of the national economy, who are called upon to have a decisive influence on the increase of production efficiency and work quality. The path to this lies through the enlargement of the system of categories and classes for all engineering and technical personnel, as has now been done for designers and process engineers in machine building. For the closer coordination of the wage with the skills, knowledge and experience of specialists it is expedient in industry and construction to conduct more regularly and carefully certifications and contests for the filling of positions, to introduce with allowance made for the job's own real conditions, following the example of the VAZ Association, a system of the promotion of engineering and technical personnel and workers. Apparently, the time has come (it is impossible, in particular, to forget the present tight balance of manpower resources) to determine with greater precision, at what workplaces a specialist of the highest skills is needed, and where it is quite possible to use specialists of average skills, or else simply workers with a general secondary education, who have been trained at vocational and technical schools. The numerous testimonies of the inefficient use of staffs of specialists, particularly engineers, are probably a kind of reaction to excessive training in a number of specialties, as well as to the fact that the latter is being carried out without proper substantiation and in many respects owing to the inertia which formed when a shortage of staffs of specialists with a higher education was being experienced almost everywhere. The bringing of the availability of the corresponding personnel in line with the real needs for them (of course, with justified consideration of the future needs as well) is, obviously, an important condition for the organization of the wage, which effectively stimulates the interest of specialists in work and in its constant improvement for the achievement of higher end results.

The increase of the stimulating role of the payment for labor also has a regional aspect, which is connected with the needs for workers, which are different over the vast expanses of our country, and with the specific conditions of the reproduction of manpower and the supply with local manpower resources. In conformity with the decisions of the 26th CPSU Congress during the 11th Five-Year Plan it is envisaged to introduce regional wage coefficients and increments for a continuous length of service in a number of eastern regions of the country. For the purposes of attracting and attaching personnel in these regions along with the increase of the wage advantages for them in the supply of housing and the services of cultural and personal service institutions and in the supply of the population with consumer goods have been outlined. Since the entire set of conditions of the functioning of manpower in different regions of the country is subject to constant changes, which affect the interregional ratios of various indicators, it is impossible to regard the work on the regional regulation of the payment for labor for the increase of its stimulating function as sporadic work, it is a permanent direction of the activity on the planned management of the socialist national economy.

The same thing can also be said about the intersectorial differentiation of the payment according to labor. During 1940-1980 the ratio between the maximum and

minimum average wage of workers and employees by sectors of our national economy decreased from 2.3-fold to 1.8-fold. Here the gap between the highest sectorial level of the wage and the average level for the national economy decreased by more than one-half. The deviations of the lowest sectorial level of the wage from the average level are decreasing, although to a smaller extent. The process of the leveling of the intersectorial differentiation of the payment according to labor expresses the extension of scientific and technical progress to a more and more equal extent to all sectors, which, in turn, is inseparably connected with the realization of the requirements of the balance of the economy in mature socialist society. With further scientific and technical progress the intersectorial differences in the payment for labor will be leveled more and more, and this will create better conditions for the improvement everywhere of the results of labor, particularly owing to the decrease of the transfers of workers from one sector to another, which are not due to the needs of society.

There can serve as a generalizing indicator of the effectiveness of the connection between the payment for labor and its results the ratio of the growth rates of the latter and labor productivity at one level or another (the entire national economy, the sector, the enterprise and so on).

In recent years the growth rates of the wage and labor productivity have drawn closer, and this phenomenon is justified from the standpoint of the increase of the stimulating role of the payment for labor. However, in some sectors, particularly such large ones as agriculture and construction, the payment for labor increased more rapidly than its productivity.

Such a situation, of course, is intolerable, especially as it is a question of a trend which encompassed an entire five-year plan. For the elimination of such a situation it is necessary not only to increase labor productivity (this, of course, is the main and decisive thing), but also to use more extensively the standardized methods of planning the wage fund and to tighten up the control of its expenditure.

In this connection the changeover from the established practice of planning the absolute indicators of the wage fund, which amounts to approximately 90 percent of the fund for the payment for the labor of workers and employees, to its standardized planning, when the amount of resources being placed at the disposal of enterprises and associations is made dependent on the end results of their activity, is being planned during the 11th Five-Year Plan. The standards of the wage should be based on technically sound norms of labor and should envisage the leading increase of labor productivity as compared with the payment for it. They should be long-term and should be approved by the five-year plan by years. The saving of assets, which is obtained as a result of the improvement of the indicators of production activity as compared with the approved standards, can be used by the enterprise for the additional material stimulation of its workers. Thus, by means of the saving on the wage fund the enterprise, in accordance with the decree of the CPSU Central Committee and the USSR Council of Ministers "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality," is permitted to pay three types of increments on the wage rates and salaries of workers and employees.<sup>4</sup>

A substantial reserve of the increase of the stimulating function of the wage is the improvement of the rate setting of labor. The proportion of workers, for

whose labor rates are being set, is increasing: according to the data of the USSR Central Statistical Administration, in October 1980 in industry rates had been set for the labor of 83.4 percent of the industrial personnel engaged directly in production, which is 15.4 points higher than 5 year before. Moreover, for workers this indicator came to 87 percent, engineering and technical personnel--68.3 percent, employees--63.7 percent. The quality of the rates being used has also increased--71.3 percent of the workers are working according to technically sound rates.<sup>5</sup> The differentiation of the levels of the fulfillment of the rates with a breakdown by sectors and occupations has decreased considerably.

In spite of the achieved gains, in the matter of improving the rate setting of labor there are still many unsolved problems. Suffice it to say that in industry so far rates are not being set for the labor of 5.5 million workers and employees. The number of experimental statistical rates being used, which lag behind the increased level of production and, in essence, are checking the increase of the efficiency of national labor, is decreasing slowly.

The main difficulties in the introduction of technically sound rates consist in the lack of standards of labor expenditures on some types of operations, the constant obsolescence of the standards and the length of the period of the revision of the wage rates. These difficulties are being eliminated by the elaboration and revision of the intersectorial and sectorial standards of labor expenditures, the increase of the flexibility of the wage system and the more extensive dissemination of the Aksay method, which envisages the payment of bonuses to workers for the upward revision of the rates on their initiative.

Such an important measure as the introduction of the brigade form of the organization of and payment for labor is playing an extremely important constructive role in the increase of the stimulating function of the payment according to labor. The aim of the work at the end result makes it possible to see in the brigade form of the payment for labor a most important reserve of the establishment of a closer and more effective connection between the labor contribution of the workers to national gains and their share in the distribution of national wealth. In this connection it is justified to speak of the fact that the careful study and generalization of the mass experience of the brigade organization of and payment for labor are one of the most urgent tasks of our economic science.

#### FOONOTES

1. See "Narodnoye khozyaystvo SSSR v 1980 g." [The USSR National Economy in 1980], Moscow, 1981, p 364; N. K. Baybakov, "O Gosudarstvennom plane ekonomicheskogo i sotsial'nogo razvitiya SSSR na 1981-1985 gody, Gosudarstvennom plane ekonomicheskogo i sotsial'nogo razvitiya SSSR na 1982 god i khode vpolneniya plana v 1981 godu" [On the State Plan of USSR Economic and Social Development for 1981-1985, the State Plan of USSR Economic and Social Development for 1982 and the Progress of the Fulfillment of the Plan in 1981], Moscow, 1981, pp 6, 23.
2. See "The Comprehensive System of the Volga Motor Vehicle Plant," EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA, No 8, 1981, p 17.

3. See G. Sarkisyan, "The Components of Well-Being," *NAUKA I ZHIZN'*, No 12, 1981, p 6.
4. See "O dal'neyshem sovershenstvovanii khozyaystvennogo mekhanizma i zadachakh partiynykh i gosudarstvennykh organov. Postanovleniye TsK KPSS ot 12 iyulya 1979 goda. Ob uluchshenii planirovaniya i usilenii vozdeystviya khozyaystvennogo mekhanizma na povysheniye effektivnosti proizvodstva i kachestva raboty. Postanovleniye TsK KPSS i Soveta Ministrov SSSR ot 12 iyulya 1979 goda" [On the Further Improvement of the Economic Mechanism and the Tasks of Party and State Organs. Decree of the CPSU Central Committee of 12 July 1979. On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality. Decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979], Moscow, 1979, p 58.
5. See Yu. Baryshnikov, "The Economic Mechanism and the Management of Labor," *EKONOMICHESKIYE NAUKI*, No 6, 1981, p 90.

COPYRIGHT: Izdatel'stvo "Vysshaya shkola", "Ekonomicheskiye nauki", 1983

#### Functions of Wages

Moscow *EKONOMICHESKIYE NAUKI* in Russian No 3, Mar 83 pp 62-68

[Article by Doctor of Economic Sciences E. Lutokhina (Minsk): "The Functions of the Wage in Mature Socialist Society"; passages rendered in all capital letters printed in italics in source]

[Text] The accomplishment of a decisive changeover to primarily intensive factors of economic development also requires the increase of the attention to the sphere of distribution, which, as was emphasized at the 26th CPSU Congress, was and remains "a subject of special attention of the party."<sup>1</sup> It is well known that any shortcomings and unsolved problems in the sphere of distribution slow the development of production and cause difficulties in the sphere of exchange and consumption. The constant and in-depth study of the processes of distribution is also necessary because the latter reacts very sensitively and quickly to the continuously occurring changes in the nonproduction sphere. The relations with regard to the wage are a most important part of distributive relations under socialism. Therefore the improvement of the wage (and it can occur only on the basis of the more and more thorough knowledge of its functions, laws of development and so on) invariably occupies an important place in the activity of the socialist state.

Every essence, as is known, is realized in a phenomenon, is enriched, is supplemented and "becomes animated" in it. Therefore the study of the real process of life cannot be limited to the analytical penetration of its deep, innermost essence, but should be oriented toward the subsequent combination of analysis with synthesis, toward the knowledge of the dialectical unity of the inner essence with the richness and diversity of its specific manifestations. Such a unity of the internal and external finds expression in the functions which are characteristic of the object being studied.

The question of the functions of the wage has not yet been settled not only from the point of view of the clarification of their qualitative characterization and conditionality, but even quantitatively.<sup>2</sup> Apparently, the main reason for such a situation lies in the fact that until recently the category of the wage was examined to a certain extent autonomously, outside systems interrelations. The approach to the problem from such methodological positions, which would reflect these interrelations, seems justified.

In understanding by a function the specific purpose, the manifestation of the vital activity of this object, let us note that the wage first of all has a number of properties which are realized in the process of its functioning. As one of the types of "personal income" THE WAGE ACTS AS A SOURCE, BY MEANS OF WHICH VITAL NEEDS ARE MET. This means that it serves for the maintenance of life, that is, for the meeting of the most important needs of man (for food, clothing, housing and so forth). The indicated property, however, is not specific only for the wage, other types of personal income: pensions, stipends, the income from the private plot and so forth, also perform this function. Consequently, here we have before us a function which is common to phenomena of every type, that is, a GENERIC function. Its exceptionally great importance stems from the fact that precisely it first of all promotes the involvement of the members of society in the process of socially useful labor.

The next generic FUNCTION OF THE WAGE IS THE REPRODUCTION OF MANPOWER. The latter is also accomplished by means of various forms: the wage, the payments and benefits from public consumption funds, the income from the private plot and from various types of self-employment and so on. Hence it is clear that the reproductive function of the wage also does not form its specific nature, its special distinctive trait. Being generic, this function, contrary to the frequently expressed opinion, cannot be recognized as the main function for the wage. If workers were to see in the wage only a means for the restoration of vitality, they would not have a substantial interest in the increase of the quantity and the increase of the quality of their labor, in the performance of jobs of greater complexity, in the sharpening of skills and in creative searches: for the limits of the direct restoration of vital forces are very limited. Given the indicated situation in socialist society the stimulus of its progressive development, which to a considerable extent characterizes the advantages of this society, would be undermined.

Like other types of personal income (pensions, stipends and so on), THE WAGE IS A MEANS OF DISTRIBUTING THE GOOD THINGS OF LIFE. This function, while signifying the allocation and distribution among people of personal income, also is not characteristic only of the wage, all other forms, through which the members of socialist society derive such income, are also affected by it. Indeed, the principle of distribution can be and actually is not uniform, but this does not exclude the common essence of this generic function.

In our opinion, there should be regarded as another COMMON FUNCTION OF THE WAGE its DESTINATION TO BE A MEANS OF THE FORMATION OF THE EFFECTIVE DEMAND OF THE POPULATION. If it is considered that the wage constitutes the predominant portion of all the income of workers (75 percent), it must be stated: the wage is the basic MEANS of forming the effective demand of the population.

The effective demand is usually understood as the monetary form of expression of the needs of the population. Consequently, it forms under the influence of two basic factors: needs and monetary income. If the demand has increased or decreased, either the increase (decrease) of the monetary income or the increase (decrease) of the needs will first of all be the causes of this. Therefore in practice the effective demands depends first of all on the amount of monetary income. The wage, which also forms the basic support of the effective demand, has the greatest proportion within it.

In examining this question, it is also impossible not to note an inverse relationship. The met satisfied demand increases the stimulating influence of the wage and distribution according to labor and prompts better labor, which makes it possible to obtain a larger wage. On the other hand, if the effective demand is not met, this decreases the stimulating importance of the wage. It is especially important to take such an inverse relationship into account under present conditions, when, on the one hand, the wage is steadily increasing and, on the other, the needs are increasing even more rapidly and, what is the main thing, are changing structurally. The inadequate consideration of these circumstances can lead to serious negative consequences, such as, for example, the formation of above-standard unsold stocks of some goods with an increase of the shortage of others, the unjustified increase of monetary savings and the stepping up of the activity of speculative elements. Such phenomena decrease substantially the stimulating function of the wage and, hence, also the efficiency of national labor. As we see, the distinction of the function of the wage as a means of forming the effective demand is of not only theoretical importance. The consideration of this function is also very important for everyday practice.

Along with generic functions SPECIFIC functions are also characteristic of the wage under socialism. One of them consists, in our opinion, in the fact that the wage under the conditions of socialism performs the function of A MEANS OF MEASURING THE EXPENDITURES OF LIVING LABOR. A function of this kind cannot be attributed to personal income as a whole, since it does not have the common attribute of direct proportionality to the quantity and quality of living labor. This attribute is characteristic precisely of the wage, although in the literature it is usually not mentioned at all when listing the functions of the wage. The latter serves as a mean of measuring the expenditures of living labor on the objective basis of the law of distribution according to labor and its interaction with the law of value. There is nothing surprising in the fact that the same law and, to be more precise, the peculiarity of the wage, which is governed by it--its proportionality to the expended labor--determine both the stimulating and the measuring function.

In practical activity the wage has already been used for a long time at enterprises for the measurement of the expenditures of living labor, particularly when making calculations of the cost of the product being produced. The wage, which is constructed on the basis of a wage system with wage scales and job and wage rate classification manuals, which are uniform for the country, on the basis of uniform, centrally established wage rates and salaries and which is determined in proportion to the labor being expended, is also used for the conscious measurement of the expenditures of labor in the case of planned pricing. Another real manifestation of the measuring function of the wage consists in this. The function in question could be used even more thoroughly in this direction, if attention were directed to it when determining not only the actual and standard production cost, but also the



socially necessary expenditures, which serve as a tool of the measurement of the magnitude of the value and, consequently, the scientifically sound determination of the price.

As we see, the fundamental possibility of using the wage for the measurement of the expenditures of living labor not only at the enterprise, which is already being done in practice, but also on the scale of society exists under socialism. When realizing this possibility it is necessary to consider that the wage also performs the other functions examined above. This has the result that additional relationships are involved in the strict proportionality between the quantity and quality of labor, on the one hand, and the amount of the wage, on the other. This circumstance nevertheless does not rule out the more extensive use of the measuring function of the wage, but merely dictates the need to identify those special principles, on the basis of which the wage can be used for the measurement of the value-forming expenditures.<sup>3</sup>

The wage serves furthermore as A MEANS OF ENSURING THE UNITY OF THE CRITERION FOR ALL THE WORKERS WHO PARTICIPATE IN THE DISTRIBUTION OF THE SOCIAL PRODUCT IN THE FORM OF THE WAGE. This function stems from the decisive influence on the wage of the economic law of distribution according to labor, as a result of which labor become the main criterion of distribution. And this criterion is uniform, it equally applies to all workers regardless of class, sex, age, nationality, type of employment and other attributes which characterize the worker. By means of this criterion the wage realizes the equality which is incorporated in the relations of directly social socialist production. And it cannot be otherwise: the common ownership of the means of production, in order to really be such, also requires equality with respect to the product which is produced by means of them. The use when distributing the social product for personal consumption of a criterion uniform for all--labor--is a means of ensuring such equality. "Equality consists in the fact that the measurement is made by AN EQUAL GAUGE--labor."<sup>4</sup> The wage also serves as a means of achieving such equality.

The stimulating function of the wage, as we have already said, has found extensive recognition in the literature. Nevertheless it seems that it is still **too early** to regard the question of the essence of the categories "stimulation" and "stimulus," as well as of their correlation with "interests" to be clarified.

In our opinion, STIMULATION IS THE SET OF MEASURES AND MEANS OF THE CONSCIOUS INFLUENCE OF SOCIETY ON THE EFFICIENCY OF THE ACTIVITY OF WORKERS AND COLLECTIVES BY THE USE, GUARANTEE AND DEVELOPMENT OF THEIR MATERIAL AND MORAL INTERESTS.<sup>5</sup> The following most important traits are emphasized in such a definition of stimulation.

First, stimulation is a complex phenomenon. It encompasses a large arsenal of interconnected measures and means, which are implemented not in one, but in different spheres of social relations. Therefore, this phenomenon should be regarded as a system.

Second, the main goal of stimulation is the influence of society on the activity of people. To increase the efficiency of all social and first of all production activity--that is what basic task the socialist state accomplishes by means of material and moral stimulation.



Third, the means to this goal is the use of interests. It is possible and necessary to achieve the increase of the efficiency of labor activity through the interests of the workers themselves and their collectives. For this by means of the appropriate measures and means it is necessary to guarantee some interests, to strengthen (or weaken) others and to use still others, so that the interests themselves, as V. I. Lenin noted, would move the life of peoples,<sup>6</sup> would promote the increase of the efficiency of the labor activity of workers. Without reliance on interests, without their real use stimulation cannot achieve its goal.

The stimulating function of the wage consists in the fact that it serves as a means, by which the socialist state consciously and systematically uses, guarantees and strengthens the material interests of workers in a greater (within rational limits) quantity and better quality of labor as a means of increasing personal income. An important influence is thereby also exerted on the increase of the efficiency of social production. It is impossible at the same time not to consider that the system of stimulation as a result of the inadequate knowledge of the interests or its unskillful use may have not a positive, but a negative effect. In case of errors in the practice of stimulation the interest in labor and its results can decrease, and very significantly.

Material stimulation, although constituting only a certain part of stimulation as a whole, is a complex system. It by no means reduces to the organization of the wage, and especially to the payment of bonuses, as is still believed at times. It is not even limited to the entire sphere of distribution. MATERIAL STIMULATION ENCOMPASSES AN ENTIRE SET, A COMPLEX SYSTEM OF MEASURES, WHICH ARE CONSISTENTLY IMPLEMENTED IN THE PROCESS OF PRODUCTION, DISTRIBUTION, EXCHANGE AND CONSUMPTION. It is especially important to stress this, since only in the case of such an approach does stimulation actually guarantee the material interests and make them a mighty motive force of production. Only in the case of the concerted and structurally sound use of various stimulating means (the base pay, bonuses, additional payments, prices and so on) is stimulation capable of yielding the anticipated effect. Otherwise the positive result from stimulation by one means (for example, the base pay) may be reduced, or else eliminated by the negative result of stimulation by another means (for instance, prices).

So that the influence of the stimulating function of the wage would be positive, one of the most important principles of socialism--the strict conformity of the wage to the quantity and quality of the expended labor--should be scrupulously observed. Moreover, the influence of the latter should be coordinated with the functioning of the other stimulating means.

The scientifically sound organization of the wages should be based on the mandatory coordination of material stimuli with moral stimuli. It would be incorrect to understand the combination of both stimuli as some equilibrium of them, which was been established once and for all. The specific circumstances can dictate the need for a "tilt" in the direction first of material, then of moral stimuli. Of course, in the case of "shifts of emphases" of this type it is necessary to consider that each of these types of stimuli, taken separately, has both positive and negative aspects. Thus, a groundlessly strong emphasis on material stimuli can also yield a negative result and can stimulate an interest in money-grubbing, which is alien to socialism. On the other hand, inordinate enthusiasm for moral stimuli can direct attention to the premature disregard of vital material interests and

needs. In the most general form, apparently, such a combination of the material and moral stimuli for labor, in case of which the manifestation of the negative aspects of both is not permitted, should be regarded as correct.

The wage under the conditions of socialism performs another function--THE MAIN MEANS OF THE STEADY INCREASE OF THE MATERIAL WELL-BEING. This is due to the influence of the intersecting effect of several economic laws. Here it must first of all be indicated that under the influence of the basic economic law of socialism production for the purposes of the maximization of the meeting of needs and the increase of the well-being of all members of society is continuously being expanded, for which there is needed a steady overall increase of the quantity and quality of labor, after which an increase of wages also follows. One must also take into account the effect of the law of the increase of needs, which is responsible for the development of newer and newer types of production for the meeting of the improving needs. Against the background of the steady expansion of production under the conditions of scientific and technical progress the effect of the law of the increase of labor productivity is also becoming continuous. Being as if in the focus of the intersecting effect of these laws, the wage under socialism naturally increases.

The wage performs not only economic functions, but also social functions. The social function of the wage under socialism is manifested, first of all, in the fact that, by strengthening among the working people the interest in labor, it thereby promotes its development into the first vital need. The material, and then the moral need to devote for the common good a portion of their time, physical and mental efforts is being cultivated among the members of society. Consequently, THE WAGE PERFORMS THE FUNCTION OF A MEANS OF CULTIVATING THE NEED FOR LABOR.

Second, in the process of labor activity and owing to it the workers join in creative work. By mastering the labor skills, which were gained by the experience of older generations, and by adapting themselves to the new conditions and needs, people introduce something of their own in the process of labor. This yields satisfaction and creates prestige for a person in society. The joy of creative work and knowledge, which has been experienced once, as well as stimulated materially, through the wage, gives rise to the need to experience it again. This cannot but influence the development of the individual, the increase of his spiritual needs and the expansion of the creative potentials. The wage, by stimulating creative initiative, performs, consequently, THE FUNCTION OF A MEANS OF DEVELOPING AN INTEREST IN CREATIVE WORK.

Third, the properly organized wage creates among the members of society the need for comradely assistance and mutual aid in work and owing to this strengthens, increases the mutual understanding and solidarity of the working people. The wage has such an influence first of all because its overall level depends on the results of the combined labor of all the members of society. Moreover, the collective piece-rate and other modern wage systems, which are based on the common labor and interchangeability of workers, as well as the bonus portion of the wage, which is determined by the overall results of the work of the labor collective, also promote labor cooperation. This is another function of the wage: it serves as A MEANS OF DEVELOPING COLLECTIVISM AND COMRADELY COOPERATION.

Fourth, the wage is a means which contributes to the development of not only the labor, but also the social abilities and qualities of the members of socialist

society. Such an influence of the wage is governed by the fact that it depends not only on the quantity, but also on all the diversity of the quality of labor. As a result THE WAGE PROMOTES THE BROADER, HARMONIOUS DEVELOPMENT OF THE INDIVIDUAL.

The task of the all-round development of a person is one of the most important tasks in the new society. F. Engels wrote that production under socialism will be subordinate to the task "to provide all the members of society with means of existence and the free development of the abilities, and to an ever increasing extent."<sup>7</sup> Under the conditions of mature socialism, which has been built in our country, the all-round development of the individual is already becoming a matter of direct social practice. The further development of production is making more and more complex demands on the worker, on his intellectual and creative abilities, his social and moral qualities. That is why the knowledge and more thorough use of the social FUNCTION OF THE WAGE AS A MEANS OF PROMOTING THE ALL-ROUND DEVELOPMENT OF THE INDIVIDUAL are of not only theoretical, but also practical importance.

Fifth, one should also not ignore the MORAL PRESTIGE FUNCTION of the wage. Its amount, by reflecting the quantity and quality of the expended labor, attests to the social recognition of the labor merits of a worker, and in the case of proper organization also shows the comparative degree of this recognition. This influences the moral state of the worker. When controlling socioeconomic development, it is also necessary to take this function of the wage into account.

Sixth, it is also impossible not to indicate THE FUNCTION OF A MEANS OF SOCIAL EQUALIZATION, which the wage performs with respect to individual social groups of working people. The realization of this function occurs both through the overall increase of the level of the wage and through the increase of its minimum.

Thus, the wage under the conditions of socialism is multifunctional. With the increase of the degree of maturity of socialist society this multifunctionality becomes more and more effective and obvious.

When analyzing the named peculiarity, it is impossible not to stress the following. All the functions of the wage, in spite of their specific traits, are within a unity. This unity is governed by the essence of the wage under the conditions of socialism. It signifies that only all together, in unity do they constitute the special phenomenon which the wage under socialism expresses. In other words, each of the functions constitutes an element of the unified whole and only in aggregate do they form what we call the wage under socialism.

However, such a unity must not be understood as something frozen and fixed. Like production relations as a whole, the relations with regard to the wage are in motion, which inevitably finds expression through the development of its functions. The period of mature socialism is characterized, in particular, by especially favorable conditions for the study of the functional diversity of the wage. During this period its functions were revealed quite comprehensively and distinctly. Along with the economic functions its social functions are becoming more and more noticeable and significant. Given such a diversity of the functions, which are in a complex dialectical interrelationship, their thorough study is necessary for the skillful management of the wage.

The development of the wage as a complex unity of its functions takes place continuously, although at an uneven pace. At the different stages of such self-movement first some aspects of it, then others develop more strongly, here definite changes also occur in the contradictions which exist between these functions.

Let us dwell in more detail on the present discrepancy of the functions of the wage. The most significant contradiction within the unity of the functions of the wage under the conditions of mature socialism, in our opinion, is the fact that some of them lead to a differentiation of the wage, while others, on the contrary, lead to their equalization, that is, to the fact that regardless of the differences of labor and its results the members of society have a more and more equal average real income. Here the stronger the equalization is, the weaker the stimulating influence of wages proves to be. Let us also note that, when examining the discrepancy of the wage, one should consider: it can form as an internally inherent, as well as an external discrepancy, which is connected with certain errors in its organization.

When revealing the above-named contradiction, it is necessary to see in it not simply coexisting, nonproblematic polarities and not an indestructible antimony, but a dialectical discrepancy as a stimulus of development. There should be considered as the fundamental basis of this contradiction the objectivity of the fact that as the general the wage is a kind of personal income and under the influence of the basic economic law of socialism is oriented toward the assurance of universal well-being, while as the particular it is proportionate to the quantity and quality of labor and under the influence of the law of distribution according to labor is "aimed" at the most subtle and precise differentiation as possible in conformity with the quantity and quality of the labor of each worker. In the former case the wage strives to be more equal, while in the latter it strives to be more different. Such contrasts within the wage pass through different stages. Under certain conditions too categorical a "preponderance" of one trend or the other is possible. All this attests that when managing the wage it is necessary to use skillfully the objective unity and discrepancy of these functions, to strengthen some or weaken others in time, in order not to disturb their properties and peculiarities, so that the organization of the wage would conform both to its objective content and to the peculiarities of the given stage of development.

The contrasts within the unity at different stages have a different strength, which determines the different stages of their discrepancy. The stage of the differences is quite "peaceful." The stage of polarization, which follows it, reveals the differences already as expressive contrasts. While the stage of the struggle between them already signifies the aim of the contrasts at mutual exclusion. Such a stage is the most acute, the contradiction which has reached it requires mandatory resolution.

Practice provides enough material to be convinced: the above-named contrasts have developed under the conditions of the present development of our national economy into quite distinct trends, one of which is the intensification of the equalization of the levels of the wage of different workers, another is the equalization of the labor efforts of workers at some average level, which is occurring on the basis of the decrease of the differentiation of wages. It is clear that the latter trend contains serious inhibiting factors.

The more active and effective use of the stimulating function of the wage in the entirety of all its functional purposes--such is the vital task which during the changeover of the economy to the path of intensive growth does not lose in the least its urgency. The wage even now should be not equal, but different, in order to reward differently the objectively still different labor of workers. But it also has, as was noted, a reproductive function and the function of social equalization. The process of the development of the wage leads not only to the differentiation of the income according to labor, but also to the convergence of its levels. And here it is important to see the objective basis of both trends. But such a basis in its essence is single, since labor is the single objective basis of the wage. Precisely it and its changes also predetermine the thorough development of the wage. The diverse objective differences of labor differentiate the wages which are formed according to labor, while the decrease of such differences in labor objectively brings together and equalizes the wage.

An important conclusion follows from what has been said: the equalization of wages should occur, but not arbitrarily, not rapidly, but to the extent of the objective conditionality, that is, the objective convergence and equalization of labor, its difficulty, skills level, responsibility and conditions of performance. A different approach would be at variance with distribution according to labor as an objective economic law of socialism. Such is the logic of the multifunctionality of the wage at the present stage, which must not be either underestimated or especially ignored.

#### FOOTNOTES

1. "Materialy XXVI s"yezda KPSS" [Materials of the 26th CPSU Congress], Moscow, 1981, p 58.
2. When describing the wage in the literature most often only two of its functions are named: a means of increasing the well-being and a means of stimulation (see "Trud i zarabotnaya plata v SSSR" [Labor and the Wage in the USSR], Moscow, 1974, p 203; Ya. I. Gomberg, "Kvalifitsirovannyi trud i metody yego izmereniya" [Skilled Labor and the Methods of Its Measurement], Moscow, 1972, p 154; "Material'nyye i moral'nyye stimuly pri sotsializme" [Material and Moral Stimuli Under Socialism], Leningrad, 1974, p 149; "Kurs politicheskoy ekonomiki" [A Course in Political Economy], Vol II, Moscow, 1974, p 553; A. Sh. Akhmeduyev, "Material'noye stimulirovaniye tekhnicheskogo progressa v promyshlennosti" [The Material Stimulation of Technical Progress in Industry], Moscow, 1978, p 11, and others).
3. For more detail on this see "Stoimost' v usloviyakh sotsializma" [Value Under the Conditions of Socialism], Minsk, 1971, pp 196-256.
4. K. Marx and F. Engels, "Soch." [Works], 2d edition, Vol 19, p 19.
5. We have already set forth in more detail in print our point of view on this question (see E. A. Lutokhina, "On the Essence of Material Stimulation Under Socialism," IZVESTIYA AN BSSR, No 4, 1962, pp 27-28; E. A. Lutokhina, "Oplata truda inzhenerno-tekhnicheskikh rabotnikov" [The Payment for the Labor of Engineering and Technical Personnel], Moscow, 1966, p 6; "Stoimost' v usloviyakh sotsializma," p 257, and others).

6. See V. I. Lenin, "Poln. sobr. soch." [Complete Works], Vol 29, p 82.

7. K. Marx and F. Engels, "Soch.," 2d edition, Vol 20, p 154.

COPYRIGHT: Izdatel'stvo "Vysshaya shkola", "Ekonomicheskiye nauki", 1983

7807

CSO: 1828/99

END